APPENDIX J.

QUALITATIVE INFORMATION FROM IN-DEPTH PERSONAL INTERVIEWS, TELEPHONE INTERVIEWS, PUBLIC MEETINGS AND WRITTEN TESTIMONY

Appendix J presents qualitative information that Keen Independent collected as part of the disparity study. More than 400 business and trade association representatives provided input analyzed for this Appendix. Appendix J is presented in eleven parts:

- A. Introduction and Background describes the process for gathering and analyzing the information summarized in Appendix J. (page 2)
- B. Background on the Transportation Contracting Industry in Arizona summarizes information about how businesses become established and how companies change over time. Part B also presents information about the effects of the economic downturn and business owners' experiences pursing public and private sector work. (page 5)
- C. Doing Business as a Prime Contractor or as a Subcontractor summarizes information about the mix of businesses' prime contract and subcontract work and how they obtain that work. (page 25)
- Keys to Business Success summarizes information about certain barriers to doing business and keys to success, including access to financing, bonding, and insurance (page 32)
- E. Potential Barriers to Doing Business with Public Agencies presents information about potential barriers to doing work for public agencies, including ADOT. (page 50)
- F. Other Allegations of Unfair Treatment presents information about any experiences with unfair treatment such as bid shopping, treatment during performance of work, stereotypical attitudes about minorities and women and allegations of a "good ol' boy" network that adversely affects opportunities for MBE/WBEs and other experiences. (page 60)
- G. Insights Regarding Business Assistance Programs, Changes in Contracting Processes or Any Other Neutral Measures presents information about business assistance programs, efforts to open contracting processes and other steps to remove barriers to all businesses or small business. (page 71)
- H. Insights Regarding Race-/Ethnicity- or Gender-based Measures presents information about general comments about the Federal DBE Program, effects of discontinuing DBE contract goals in 2006, and any impacts of DBE contract goals on other businesses. (page 81)

- I. DBE Certification presents information about the DBE certification process. It also presents information about advantages and disadvantages that subcontractors experience because of their certification as a DBE or MBE/WBE/SBE. (page 92)
- J. Overall Comments about the Preliminary Proposed Overall DBE Goal for FHWA-funded Contracts and the 2014 Availability Study (page 97)
- K. Summary of 2015 Public Meeting Comments and other Input (page 99)

A. Introduction and Background

The Keen Independent study team conducted in-depth personal interviews and availability interviews from May 2014 through April 2015. The study team held a listening session involving seven representatives of minority-, women- and majority-owned firms in Tucson in May 2014. ADOT held public meetings in August 2014 and also asked for written comments concerning the 2014 Availability Study and its proposed overall DBE goal for FHWA-funded contracts. ADOT held additional public meetings in July 2015 and solicited written comments concerning its proposed overall DBE three-year goals for contracts receiving FHWA, FTA and FAA funds and the draft 2015 Disparity Study.

In the in-depth personal interviews, availability interviews, listening session and public comment process, business owners and managers had the opportunity to discuss their experiences working in the local transportation contracting industry; experiences working with ADOT and other public agencies; perceptions of the Federal DBE Program and other topics important to them.

In-depth personal interviews. The study team conducted in-depth personal interviews with 66 Arizona businesses and trade associations. The interviews included discussions about interviewees' perceptions and anecdotes regarding the local transportation contracting industry; the Federal DBE Program; and the contracting and procurement policies, practices, and procedures of ADOT. Interviews were conducted by Keen Independent, Así Marketing, a Phoenix-based Hispanic female-owned consulting firm, Don Logan and Associates, a Phoenix-based African American-owned consulting firm, Gordley Group, a Tucson-based woman-owned consulting firm and Genesis Consulting group, a Phoenix-based Hispanic female-owned consulting firm.

Interviewees included individuals representing construction businesses, engineering firms and trade associations. The study team identified interview participants primarily from a random sample of businesses that was stratified by business type, location, and the race/ethnicity and gender of business owner. The study team conducted most of the interviews with the owner, president, chief executive officer, or other officer of the business or association. Of the businesses that the study team interviewed, some work exclusively or primarily as prime contractors or subcontractors, and some work as both. All of the businesses conducted work in Arizona. All interviewees are identified in Appendix J by random interviewee numbers (i.e., #1, #2, #3, etc.).

Interviewees were often quite specific in their comments. As a result, in many cases, the study team has reported them in more general form to minimize the chance that readers could identify interviewees or other individuals or businesses that were mentioned in the interviews. The study

team reports whether each interviewee represents a DBE-certified business and also reports the race/ethnicity and gender of the business owner.¹

Availability interviews. The study team also asked firm owners and managers to provide comments at the end of the online or telephone interview. Businesses were asked: Do any other barriers come to mind? Do you have any general thoughts or insights on starting and expanding a business in your field or winning work as a prime or subcontractor in Arizona?

A total of 350 businesses provided comments. The study team analyzed responses to these questions and provided examples of different types of comments in Appendix J. Availability interview comments are referenced as "AI."

Listening session. Keen Independent and Gordley Group held a listening session on May 27, 2014 in Tucson, Arizona. The seven participants recruited by Gordley Group included representatives from Tucson area minority- and women-owned firms and large majority contracting firms. Comments from the Tucson listening session are noted as "TLS."

2014 public meetings. Beginning in July 2014, ADOT solicited comments concerning its proposed overall goal for DBE participation in FHWA-funded contracts for FFY 2015 through FFY 2017. It held meetings with the following stakeholder groups in July 2014:

- ADOT External Stakeholders Group on July 21, 2014;
- ADOT DBE Construction and Professional Services Task Forces on July 22, 2014; and
- Local Public Agency Meeting on July 29, 2014.

ADOT published its Goal and Methodology along with the Draft 2014 Availability Study on August 4, 2014 for public review and comment. ADOT made wide-ranging efforts to publicize the goal and opportunities for public input, including distribution of the information to more than 4,000 individuals and organizations throughout the state. For example, ADOT:

- Made documents available through its website and provided hard copy documents at ADOT's Administration Building in Phoenix and District Offices in Yuma, Flagstaff and Tucson;
- Encouraged the public to provide written comments online, via email or by mail until the close of the public comment period on September 17, 2014 (45-day comment period): and

¹ Note that "male" or "white" are sometimes not included as identifiers to simplify the written descriptions of business owners.

Invited the public to attend public hearings including a presentation and opportunity to ask questions, and then provide any verbal or written comments about the proposed overall DBE goal. Individuals from construction, engineering firms and chambers of commerce were in attendance.

These public meetings included the following Arizona locations:

- Yuma, on August 18, 2014;
- Tucson, on August 19, 2014;
- Flagstaff, on August 25, 2014; and
- Phoenix, on August 27, 2014.

The study team reviewed and analyzed comments from these meetings and provided examples in Appendix J. Public meeting comments are referenced as "PM."

2015 public meetings. Beginning in May 2015 as part of the 2015 Disparity Study, ADOT solicited comments concerning its proposed revised overall DBE goal for FHWA-funded contracts and its overall three-year DBE goals for contracts receiving FTA and FAA funds. It also held meetings with the following stakeholder groups in May and June of 2015:

- ADOT External Stakeholders Group on May 18, 2015;
- ADOT DBE Construction and Professional Services Task Forces on May 26, 2015;
- Local Public Agency Meeting on May 28, 2015; and
- American Council of Engineering Companies (ACEC) on June 9, 2015.

ADOT published its Goal and Methodology documents along with the Draft 2015 Disparity Study in early June for public review and comment. ADOT made wide-ranging efforts to publicize the goals and opportunities for public input and made documents available through its website and at ADOT Business Engagement and Compliance Office. ADOT encouraged the public to provide written comments online, via email or by mail or fax through July 23, 2015 (45-day comment period). Finally, ADOT invited the public to attend public meetings to hear a presentation, ask questions and then provide any verbal or written comments about the proposed overall DBE goals.

The 2015 public meetings were held from 3:00 pm to 5:30 pm in:

- Flagstaff on July 8, 2015;
- Yuma on July 13, 2015;
- Tucson on July 14, 2015; and
- Phoenix on July 16, 2015.

Attendees signed in at each public meeting and court reporters transcribed the public comments portion of each public hearing.

The study team reviewed and analyzed comments from the 2015 meetings and summarized results under Part K at the end of Appendix J. Public meeting comments are referenced as "PM."

Written testimony. Public comments were also received in 2014 and 2015 via email. These comments were analyzed by the study team and provided in Appendix J. Written testimony is referenced as "WT."

This appendix organizes verbal and written comments by topic. It begins by listing some of the questions asked at the public hearings and a summary of the corresponding responses given by ADOT or Keen Independent at those hearings.

B. Background on the Transportation Contracting Industry in Arizona

Part B summarizes information related to:

- How businesses become established (page 5);
- Challenges starting a business (page 6);
- Changes in types of work that businesses perform (page 9);
- Fluid employment size of businesses (page 10);
- Flexibility of businesses to perform different types and sizes of contracts in different parts of the state (page 12);
- Local effects of the economic downturn (page 14);
- Current economic conditions (page 18); and
- Business owners' experiences pursuing public and private sector work (page 21).

How businesses become established. Most interviewees representing construction and engineering businesses reported that their companies were started (or purchased) by individuals with connections in their respective industries. [e.g., #6, #8, #9, #26, #27,#28, #39, #62]

Many firm owners worked in the industry before starting their own businesses. [e.g., #5, #55, #49] Examples from the in-depth interviews include the following:

An African American business owner with MBE, SBE and DBE certifications reported that he grew up around construction in Texas. When it came time to start a business he looked to the construction industry. "So I moved out here [Arizona] and I was pretty much doing highway work, and then I saw that [specialty contracting] was a good loop in the business and that's the one I decided to go with, which is basically doing streets and highways." [#1]

- A Native American sole proprietor of an engineering firm commented that he had worked for two engineering consultants prior to starting his own business. [#63]
- The business partner of an engineering-related firm (seeking DBE certification) reported having worked in the field since 1977 [prior to launching his business in Arizona]. [#2]
- The vice president of a DBE-certified specialty contracting business reported, "Both [business] owners were involved as laborers and worked their way up to [equipment] operators through the boom of [specialty contracting] industry in the late '80s to early '90s. When that market dried up, they decided to buy the [equipment] capable of completing large enough jobs to support the family. That vision turned into what we have today, from one [piece of equipment] to ten" [#3]
- The female owner of a trucking firm reported that her partner had always been a truck driver. "[He] has always been a truck driver. He bought his first truck in 1975 and put it to work in 1979." [#22]
- The female owner of a DBE-certified engineering firm reported that she started her business while on maternity leave from another firm. An existing client was unable to find the services she provided anywhere else. [#43]
- At a public hearing, a Hispanic American female construction business owner testified about how people got to be construction business owners. "We didn't go to college to get into the construction business. My husband worked for another contractor and ... he got laid off and 'bam!' we were in business." [PM#1]

Challenges in starting, operating and growing a business. Interviewees had wide-ranging comments about the challenges in starting, operating and growing a business.

For some, securing opportunities was particularly difficult, especially at start-up. For example:

- The vice president of an MBE- and DBE-certified specialty contracting business said that greatest challenge was getting the chance to perform work as a new business. [#3]
- A Native American business owner indicated that he had encountered start-up challenges because of his background and lack of opportunities. [#10]
- The challenge for a Hispanic American representative of a minority-owned remodeling business is "just trying to get [a] foot in the door." [AI#340]
- A representative of a white woman-owned highway construction business reported, "With a small business, it is much more difficult to start and grow your business (especially in the construction field) ... it is difficult to gain access to a network." [AI#200]

Many reported a combination of challenges in starting, sustaining or growing their business. [e.g., #7, AI#16] Some businesses faced a number of barriers including time management, financing, job size, timely payment and other factors:

■ The African American owner of a DBE-certified firm reported that financing was the number one challenge he faced. He added, "Challenge number two is the intimidation or the fear of what the size of work I want to do or what I wanted to do. So, I use the strategy of how I am going to start the business and how I am going to make this work." [#1]

The same business owner reported a mental business plan at start-up; his not relying on a written business plan caused additional challenges over time. [#1]

- The representative of a white woman-owned specialty contracting firm reported, "You need to be able to get bonded; small companies have trouble getting bonded for large projects. The bonding is a major factor and getting my money on time instead of having to wait two months ... and also having to purchase a larger insurance package from larger companies when I have my own." [AI#201]
- The business partner of an engineering-related firm (seeking DBE certification) faced a number of challenges including, time management, long hours, securing and managing finances, and getting paid in a timely manner. [#2]
 - For the same partner, job size was also a challenge indicating that some public sector jobs could be too large to handle.[#2]
- The African American representative of a minority-owned heavy construction firm identified "funding for bond[s] and being treat[ed] fairly and equally" as primary challenges. [AI#203]

Many businesses faced financial barriers at start-up and beyond. Some interviewed faced challenges securing access to working capital and other financing, and timely payments.

- A Hispanic American representative of a minority-owned engineering firm reported "access to start-up capital" as a barrier. [AI#222]
- The representative of a DBE-certified engineering firm indicated that the business ran out of money in its first year of operation, but has since grown from two to a staff of eleven Early financial challenges have since made the firm cautious about hiring. [#16]
- An SBE-certified specialty contracting firm encountered financial challenges. The owners tapped credit cards and family to keep the business afloat. [#8]
- For a DBE-certified engineering-related firm, slow payment is the biggest form of unfair treatment. The business owner reported submitting invoices and waiting up to 90 days for payment. [#17]

Some business owners and representatives interviewed reported a myriad of operational barriers to starting, sustaining and growing their business. For example, a number of businesses reported inexperience with business administration, long working hours and marketing:

- The female owner of a DBE-certified engineering firm stated that she faced many challenges at start-up. She reported being uneducated in business, and undercapitalized; although knowledgeable in engineering, she was inexperienced in the business sector. [#43]
- The leader of a minority trade association indicated, "The problem for small businesses is that they work for someone else for 10-20 years and then open their own business. They know how much labor and materials it takes to do the job; where they fall short is on the administrative side." [#69]
 - The same CEO added that small businesses are "too busy working in the business instead of on the business." [#69]
- The Hispanic American owner of a DBE-certified engineering firm reported challenges in marketing and securing certain types of insurance ... the first due to lack of knowledge, and the second due to prohibitive cost. [#13]
- The owner of an Asian-Pacific American-owned DBE-certified engineering firm reported few start-up challenges, but still had difficulties entering public sector. He added that small businesses often do not have the capabilities required to conduct ADOT projects, for example. [#19]

A number of businesses reported government "red tape" and regulations as barriers to starting, operating and growing their business. Examples include:

- For a white woman-owned trucking firm, barriers included "red tape on government [work] and taxes." [AI#125]
- A Hispanic American owner of a woman- and minority-owned specialty contracting business said, "I wouldn't start a construction company in Arizona again ever; the regulations and requirements are too cumbersome." [AI#238]

Others reported competition from lesser qualified businesses and limited enforcement of regulations as a barrier to sustaining and growing their business. Comments include:

A Hispanic male owner of a non-certified firm providing specialty contracting services said that the primary challenge is that many firms compromise standards to work cheap. He has not secured government work, because other firms do the work for half the price. He added that he refuses to compromise work quality to offer a competitive price. [#30]

■ The representative of a white woman-owned specialty contracting firm reported competition from unlicensed contractors as a challenge. "If I had it to do over I wouldn't, because of the lack of enforcement of [c]ontract laws. Unlicensed contractors are not prosecuted ... the total lack of enforcement of contract laws by local people. I don't think they care, they don't want to do their jobs." [AI#66]

Some reported surviving by turning the challenges they faced at start-up into opportunities for their businesses. For example, the CEO of a DBE-certified design engineering firm reported, "Yes there was [challenge]. Because of the background we come from, and the [lack of] opportunities, but we're determined to overcome them all and we still have that attitude today. And we don't treat it as a hindrance; we treat it as a 'niche' to help us." [#10]

Some interviewees indicated that due to their previous experiences and contacts, there were little to no challenges in starting their business. For example, as a connected Native American business owner, one interviewee indicated that he focused on tribal work. After the first few months in business, he reported he had no trouble getting work. [#63]

Changes in types of work that businesses perform. Interviewees discussed whether and why over time firms changed the types of work that they perform.

Several interviewees indicated that their companies had changed or expanded their lines of work to respond to market conditions, or to fill an open niche. For example:

- The CFO of an SBA-certified general contracting firm reported that the firm began in the 1970s as a materials supplier and now conducts general contracting in addition to supplying materials. [#12]
- A DBE-, MBE-, SBE-, and SBA 8(a)-certified engineering consultant reported expanding services to market a more complete package to primes. "Currently we have capabilities to perform surveys, technical, civil engineering, structural, transportation other than landscaping and ... we can pretty much provide any type of services to the primes." [#9]
- A representative of a large construction firm commented, "We have migrated over the years; years ago we did a lot of work for developers. We transitioned from private work to [public sector] work for Phoenix, Scottsdale, and other cities and agencies throughout the Valley."
 - He added, "We had become primarily an ADOT company over the last 15 years; and now we do other agencies work as well. The focus changed from private to public because the developer market diminished at the time The housing developer market dried up." [#66]
- The representative of a WBE- and SBA-certified specialty contracting firm indicated that the firm began in 2000 with concrete, added HVAC in 2007 and plumbing after that. [#14]

- The representative of a DBE-certified engineering firm reported having worked in the same engineering field since start-up but has enhanced services by adding expanded engineering-related services. [#16]
- A partner in an Asian-Pacific American-owned DBE- and SBE-certified specialty contracting firm reported that the firm performs underground jobs in addition to their standard services. The firm expanded scope to include a variety of work. [#25]
- The representative of a majority-owned professional services firm stated that their strategic plan during the downturn was to "diversify." He said, "[Additional services] were added to the firm." [#34]

One association leader explained the benefits of being adaptable. The male president of a construction contractors association stated, "There are some businesses that pivoted from the private sector to public sector [that] were able to survive and for those who were not able to pivot, really lost it." [#47]

Fluid employment size of businesses. The study team asked business owners about the number of people that they employed; and whether their employment size fluctuated.

A number of companies reported that they expand and contract their employment size depending on work opportunities, season, or market conditions. Comments include:

- A Native American in the civil engineering industry reported that the size of the firm grew with the economy, but when the economy went bad, the size of the company shrank. [#10]
- A Native American sole owner of an engineering firm indicated that he is able to bid and get larger jobs such as full size subdivisions because he has capability to hire more staff during good economic times. [#63]
- The CFO of an SBA-certified general contracting firm reported expanding and contracting staff. "It [firm size] usually stays around 30 or 35 employees. If we have a big highway construction job, it could go up to 50 employees for that project." [#12]
- A Hispanic male owner of a non-certified firm providing specialty contracting business said that he usually has only two to three employees, but he sometimes hires more people temporarily for certain projects. [#30]
- The female owner of a DBE-certified specialty contracting company stated that the number of employees that the company has fluctuated over time. She currently has little work and has trouble keeping six employees. The work is seasonal and affected by budget patterns throughout the fiscal year. [#39]
- The female owner of a DBE-certified engineering firm reported that her business has 14 employees, both part-time and full-time. She used to have 18 employees, and then it went down to eight. The business has rebounded to 14 employees. [#43]

■ The female owner of a firm described how her firm adapted during the recession. "We're working on a project and not getting paid ... everyone [employees] had to go down to 32 hours, we did things like negative comp time and positive comp time ... you had a busy week so you had to take time off ... you had to look at every month and how we were going to survive and how do we keep everyone, we did have to layoff some. Five years ago you were able to just work, work, work, work, now there's a lot of non-billable work getting done ... we can do our website now in-house." [TLS]

Some interviewees said that they had reduced permanent staff because of the economic downturn and poor market conditions. For example:

- The representative of a WBE- and SBA-certified specialty contracting firm stated that the firm had dropped from a high of 80 employees pre-recession. "In the dark days we were probably down to 15 to 20 [employees]. We've picked up a couple of decent jobs so we are at the 30s now." [#14]
- A DBE-, MBE-, SBE-, and SBA 8(a)-certified engineering consultant reported growing his business to a staff of 40, then dropping half of those employees during the downturn. [#9]
- A Hispanic DBE-certified general contractor indicated that his firm was forced to lay off 24 employees resulting from the economic downturn. [#50]
- The CEO of a DBE-certified Native American-owned design engineering firm reported a staff that grew with the good economy and shrank during the economic downturn. They planned to expand again during the recovery. [#10]
- A white male representative of a professional engineering association said employee numbers dropped "quite a bit in the last five or six years." [#36]
- The Hispanic male owner of a specialty contracting firm reported, "The construction industry took a gigantic hit ... the firm had employed 80 to 90 people before the [economic] downturn, but employed only 47 at present." [#44]
- The representative of a majority-owned professional services firm said, "During the downturn we lost near half of our staff. Then we were able to come back because during the downturn, we tried to be strategic on what to do and eventually we recovered." [#34]
- An estimator for a majority specialty contracting firm reported, "It [the Great Recession] made everyone make tough decisions. We had to downsize. Competition has gotten fiercer; we have seen competitors that were not there before in the prerecession." [#48]
- The female owner of a DBE- and SBE-certified engineering firm reporting dropping form a high of 15 employees to seven during the Great Recession. [#70]

Flexibility of businesses to perform different types and sizes of contracts in different parts of the state and sometimes out-of-state. Interviewees discussed types, locations, and sizes of contracts that their firms perform.

Many firm owners reported flexibility in the locations where their firms perform work. [e.g., #13, #14, #18, #22, #38, #58] Relevant comments included:

- An Arizona-based engineering-related business (minority-owned) reported to conduct mostly public sector assignments (90%), with 85 percent of the work out-of-state (New Mexico, Texas, Utah, Colorado and Nevada). [#5]
- The CEO and operations manager of a Native American-owned DBE design engineering firm reported holding licensing for certain engineering assignments in Arizona and New Mexico. This firm primarily performs design-build services in the public sector's "niche" Native American market (including federal jobs). [#10, #11]
- The representative of a small business-certified majority-owned construction firm indicated that they have a subsidiary company in New Mexico. [#20]
- The female owner of a DBE-certified specialty contracting firm stated that her company is based in a rural Arizona community. They travel all over Arizona and Nevada for work. She is also considering getting a contractor's license in New Mexico. [#39]
- The Hispanic female owner of a non-certified specialty supply company reported that her firm had recently expanded from a local supplier to statewide operations. [#40]
- The Hispanic male representative of a minority contracting association and public hearing participant reported that due to increased competition among contractors, "Some ... look for work outside of [the city]." [PM#4]
- The female owner of a DBE- and SBE-certified engineering firm reported working in California to get through the downturn. [#70]

Other companies said that they prefer to perform projects close to their businesses. For example:

- A representative of a majority-owned business indicated that they only do work within one hour of their location.[#26]
- The CFO of an SBA-certified general contracting firm indicated a preference for nearby work (typically within a 75-mile radius). The business does not pursue any out-of-state work. He said, "We have good relationships in both public and private sector. It's kind of unique that we don't go all over the state." [#12]

Some firm owners indicated that their companies perform both small and large contracts. [e.g., #19, #39] Comments include:

- Small projects and contracts up to \$12 million constitute the work reported by the CFO of an SBA-certified general contracting firm. The CFO explained that any public sector project larger than \$12 million is beyond the firm's capacity. [#12]
- The owner of a WBE-certified specialty contractor said, "At first a \$50,000 job was a big deal, but now a \$500,000 job is not enough and these jobs are few and far between." [#38]
- The Hispanic female owner of a non-certified specialty supply company reported that her firm handles both large and small contracts. [#40]
- A DBE-engineering firm that typically bids larger jobs reported, "I mean there are some projects that I stay away from, just because of the same kinds of comments that you get about DBEs not being able to perform on contracts, and you just kind of blow it off. Obviously the bigger firms have a lot of advantages over us personnel-wise, so a lot of people want to give us the small projects and the bigger ones the big projects." [#16]

Some firms reported setting a ceiling on project size, finding their comfort zone and sticking to it. Examples include:

- The minority owner of a specialty-contracting firm stated that no job is too small. She indicated that large projects presented an obstacle for the firm. [#8]
- The representative of an SBE-certified majority-owned construction firm limited the size of projects the firm performs. "If you try to bite off more than you can chew, it could be damaging to the company. We try to stay in our comfort zone, which is \$500,000 to about \$1.5 million." [#20]

Many firms reported that they work in several different fields, or that they had changed primary lines of work over time. Some of those comments include:

- The business owner of a minority-owned engineering-related business reported a broad range of expertise, "I think you have to be adaptable in this market. I think you have to be willing to get out of your comfort zone Otherwise we would have been a bankrupt business When people tell you 'no,' I think you have to go do it anyway." For example, "Just because I do not have a contract to do [specified] truck [work], doesn't mean I can't do the work. I have a truck sitting in front of my door." [#5]
- The president of a women's business organization remarked, "Businesses need to look at ways they can expand on the services they provide. They need to always think of their business as a retail business even in the service industry. They must commercialize the things they do." [#59]

• An estimator for a majority specialty contracting firm reported, "We pride ourselves on not being too proud of anything. We've gotten into landscaping businesses for a short time back in the early 2000s when the private work was going well in Phoenix." [#48]

The same estimator added that at the start the firm was primarily a 'dirt' contractor and that shifted to paving from the 1990s to 2000s. In the last ten years, the company has added building bridges and [retaining] walls. [#48]

- The Hispanic female owner of a non-certified specialty supply company reported that the business began by selling signs, then added traffic control, then vests and other safety equipment. [#40]
- The female owner of a DBE-certified engineering firm said that as she has been getting more public sector work, the business diversified with a broader range of transportation planning and design engineering. The business added transit work over time. [#43]

Local effects of the economic downturn. Interviewees expressed many comments about the economic downturn.

Most interviewees indicated that market conditions since 2008 have made it difficult to stay in business. [e.g., #13, #24, #30, #38, #39, #58] For example:

■ The female owner of a woman- and minority-owned professional services firm described the 2008 to 2009 construction-related business environment. She began indicating that the leadership among the contractors changed frequently and employees would bounce from one prime contractor to another. She said that during this time, "low bid was an understatement." Firms were bidding lower than what the estimator would recommend and they saw many firms falling out of the market. [#73]

She went on to say that there were also many other firms entering the market. For example, residential construction contractors (i.e. earthmovers) saw the ADOT market as attractive because there were projects happening that were not in the residential industry. These new firms did not know what the government regulations looked like and they did not adjust their cost estimates to reflect the costs that exist with complying with the regulations. [#73]

- With only 5 percent of his work volume generated by private sector customers, the African American owner of a specialty contracting firm (MBE-, SBE- and DBE-certified) stated that his business "flat-lined" during the economic downturn. For example, he could not secure work with ADOT and received no invitations to bid from other sources. He stressed, "[The economic downturn was] horrible [but] you can't break somebody that is already poor." [#1]
- Referencing the economy, the female owner of a WBE-certified professional services firm said, "It has been an absolute struggle. I've used everything I have economically to stay in the marketplace. It's been very, very difficult." [#33]

- The CEO of a DBE-certified design engineering firm indicated that business dropped to nothing, as a result of the economic downfall, and has since been regenerated. [#10]
- A minority-owned engineering-related firm reported, "[During the recession] we had to look for places outside of normal avenues for getting work. We have been able to show expertise with regards to our construction and [have] been reported recently to the [SBA] 8(a) program for opportunities to find some work." [#5]

In addition, the female senior vice president of the same firm stated that they observed other subcontractors going bankrupt. [#46, #47]

- The owner of a DBE-, MBE-, SBE- and SBA 8(a)-certified engineering firm reported, "Economy has taken its toll. We were almost 40 [staff] in 2010. Now we have 20 people" [#9]
- The owner of a DBE specialty contracting firm reported that the recession prompted fewer on-time payments, making staying in business a challenge then and now. [#8]
- The leader of a local small business association reported "complete collapse, downsizing and revised business models" within the local construction industry. [#56]
- The president of an engineering association commented that the economy appears to be improving; however, professionals in his industry have not yet recovered from the poor economy. He reported that engineering has seen less recovery than most other industries. He added that the public sector "may be doing a little better" than the private sector, but did not feel either sector was doing well. [# 57]
- A representative of a majority-owned materials supply firm said that he left the business in 2009 due to the economic downturn. By 2011, the business "was practically devastated." The business is only recently recovering.[#26]
- For the female owner of a DBE- and SBE-certified engineering firm, effects of the Great Recessions include impacts on long-term project planning making life for employees "a rollercoaster ride." She added as a consequence that the firm is run as a cash-based business. [#70]

Some reported that minority-owned firms were particularly hard hit during the Great Recession. A number of examples include:

- The Hispanic business representative of a DBE-certified firm witnessed a large number of minority-owned businesses going out of business, particularly those businesses that were newer or not well known. [#50]
- The Hispanic American owner of a DBE-certified engineering firm reported that the economic downturn created an "unfavorable work environment for a minority-owned business." [#13]

- A Hispanic female business owner reported that the economic downturn had "absolutely" affected her company, reporting that her firm's annual revenue dropped 70 percent. [#55]
- Many participants in the Tucson listening session knew of businesses that had gone out of business during the economic downturn including trucking and other DBE industries. A majority contractor reported that he knew of several minority-owned firms that had not survived. "I know there were several minority firms that had been in business for a long time went out of business. It was a combination of market or credit lines." For example, one minority contractor he knew made the decision to shut his business because he feared the consequences of losing everything he owned at the age of 60.

Many business owners and managers said they have seen much more competition during the economic downturn. They reported that more competitors are going after a smaller number of contracts in specific fields, with substantial downward pressure on prices. Larger firms have been bidding on work that typically went to smaller firms. These trends affected construction and engineering companies. For example:

- The representative of a woman- and minority-owned specialty contracting firm reported an imbalance between number of businesses and available work. "Competition is a barrier, [there are] many more businesses now than in the past. If there is a lot of work to be done, there would be no problem in expanding if the work is available." [AI#339]
- A representative of a large publically owned firm said, "The market is not as robust as it
 used to be. The work is far more competitive, it's hard to keep people employed and
 stay alive." [#66]
- For the representative of a woman-owned business, "The work is going very cheap."
 [AI#321]
- A female representative of an SBA 8(a)-certified engineering firm commented that the work they have done with ADOT has primarily been design-bid-build; however, the business is trying to stay away from that work because of intense competition in the economy. She reported that the competition is "cutthroat" and people have hurt others and themselves over the competition. [#18]
- The representative of a woman-owned design and construction firm reported, "The general economy conditions are the primary barrier." [AI#328]

Some business owners described how the downturn in the economy affected the public and private sectors differently

■ The representative of a majority-owned professional services firm said, "At first, the private side was nonexistent and now the public side is harder. Public has funds that come in and they are programmed for five years; it tends to stay stronger longer than private side. So, the public agency stuff is the primary reason we survived the downturn

because that was our income earning work — the private side then was nonexistent. Now, the public agency work is probably at its lowest point since the downturn started and that is because they have not received any benefits in terms of programs from increased sale taxes and increased property values. We expect that we are not through at all; the public sector is going to be slow for a year or two." [#34]

One prime contractor in the Tucson listening session reported that as a result of the economic downturn, some firms jumped from one industry to another. For example, "Almost everyone in the subdivision business got into the public works business ... when the subdivision business went down all of a sudden instead of having four or five bidders in the public works sector you had eleven to twelve so the market became a noprofit market ... by the summer of '08 the market was full of people coming out of other areas. There was a long learning curve for some of them." However, a minority and women-owned business added despite those learning curves in her experience, "the firms that do move quickly do survive."

According to interviewees, a few businesses may have survived because they were well capitalized going into the economic downturn. For example:

- A minority-owned engineering-related business owner reported an advantage because he had secured pre-downturn financing. "When the recession did hit, they were up to a point where they weren't giving any loans. For me, I had the relationship to survive through that and I already established a liability that they couldn't take away. We got a line of credit we could use to finance our day-to-day stuff." [#5]
- The Hispanic female owner of a non-certified specialty supply company remarked that being a small business saved them when the economy faltered. She said that many larger companies went out of business at that time because of high overhead costs; her company, however, was able to weather the poor economy with low overhead costs. [#40]

Several business owners said that DBE and other certifications helped them sustain their businesses during the economic downturn, or could help them improve their opportunities in the new economy. Comments include:

- The Operations Manager of a DBE design engineering firm reported that they see more competition since the downturn, but certifications with ADOT [DBE] and SBA help them stay competitive. [#11]
- For one engineering-related business owner, obtaining DBE certification would help diversify his business in the new economy. [#2]
- The female owner of a trucking firm reported not having turned a profit in the past eight years. She indicated that the firm is seeking DBE certification and that DBE certification could help her increase opportunities and grow the business. [#22]

A representative of a municipality reported how the struggling economy affected the DBE Program. "As the economy has continued to struggle, the DBE Program has seen more difficulties as prime contractors look to enhance their profits, and protect their firms from financial realities." [WT#10]

Some businesses indicated that having had previous experience facing the challenge of intermittent work helped them survive the economic downturn. For example, a DBE-certified specialty contractor indicated an ability to weather downturns as the firm had previous experience with extended downtime between work opportunities. The firm planned slow growth over time to sustain itself, since 2007. [#8]

A few business owners and managers said that their companies did not see a decline in work during the economic downturn, or were experiencing slowdowns that are more recent. Examples include the following:

- A MBE- and DBE-certified specialty contracting business representative noted, "Because of our relationships, we were able to flourish during the 'down' economy. A lot of the smaller, one-drill, one-man, family operations didn't survive in the downturn so that allowed us to create a market share." However, he offered that to stay competitive, he lowered his pricing from a high during the "boom." [#3]
- The CFO of an SBA-certified general contracting firm indicated having been busy during the downturn; but now slowing down. "We didn't really experience it here. The past five years we have been really busy. We've had some of our better years actually the past three or four years. It has been slowing down now." He explained, "I think a lot of it has to do with the mine here around the area. They seemed to keep busy during that time." However of late, he reported a slowdown resulting from the City not having funds to conduct construction projects. [#12]

Current economic conditions. Many business owners and managers reported that economic conditions had not fully recovered.

Some interviewees said that they have not yet seen an upswing in market conditions, or that the recovery has not been what they had hoped it would be. [e.g., #15, #39] For example:

- The owner of an engineering-related minority-subcontracting business reported fewer opportunities to do business with primes. "When I started in 2005, during the boom, primes were more willing to share the projects with little companies because they were overwhelmed, but now the economy is in the downturn the primes aren't willing as much to share the work little subs especially little DBEs." [#5]
- The female representative of an industry association described local marketplace conditions as, "Tight ... very cutthroat ... very price conscious." For greatest effect, she reported that firms require, "Right pricing, right skill set, [and to be] effective at cost management, effective at time management, and core competencies ... must be competitive." [#68]

- A Hispanic American female construction business owner commented on general marketplace conditions in a public hearing. "Coming from contracting, my husband and I have owned a business for 23 years, and ... it hasn't been a recession for our business, it's been a depression to the point where we're about to lose it [our business] because it's so bad." [PM#1]
- For the representative of a white woman-owned specialty contracting firm, post-recession marketplace conditions have "made it difficult to grow" the business. [AI#144]
- A representative of a large publically held firm indicated the firm is still having trouble in the market today. The firm is still experiencing financial difficulties, so too, are his subcontractors. He added ADOT and local municipalities are not doing work. He notices this also in Chandler, Gilbert and Scottsdale.[#66]
- A representative of a minority business assistance organization remarked that the current economy is very slow and businesses are having a hard time. He also mentioned since there were relatively few large jobs available. In order to make enough money to keep afloat, large firms were taking many of the small jobs that would normally go to much smaller firms. This results in smaller firms struggling to find contracts. He said, "Simply, it's tough out there." [#53]
- The president of a women's business organization said, "Although business is improving ...they are still running into challenges." [#59]
- The representative of a woman- and minority-owned specialty contracting business reported that the firm's "work has been slow since 2009." [AI#345]
- The African American owner of a concrete subcontracting business stated that ADOT has plenty of work in his field, and the amount of work has increased. However even in good years, there were not a lot of bid opportunities. "Overall, jobs have increased but it does not balance the bad years." [#1]
- The leader of a minority trade association reported, "It's [the economy] still depressed, it's time to make headway. We're seeing a little margin now; we're going in the right direction, but not as good as the past." [#69]
- A female representative of a SBA-certified engineering firm reported, due to extremely competitive pricing, that the firm is not getting a lot of business in the present economy: sometimes busy and sometimes not working at all. This business representative predicted a grim outlook for the next two years. [#18]

She went on to say, "Recently, we found that there is some public work that we have gone after ... what they consider best value. You're submitting qualifications and price. They look at your price first and if you're low, then they open your qualifications. If the guys are technically-qualified, then the work is given to them." She added that the firm

- is stuck competing with businesses that price low, or larger firms that can secure bonding. (The firm cannot get bonded for larger projects.) [#18]
- As compared with his firm's pre-downturn revenues, an engineering-related business partner reported a disappointing recovery. "We hit a brick wall five years ago and we are no longer near where we were five years ago. In 2008, that is when construction really came to a halt." [#2]
- A Hispanic male owner of a non-certified firm providing electrical services said, "The whole year has been tough." He added that he gets more work now, but the prices are still a problem because of unrealistic pricing by his competitors. "I had to work for mediocre money with my high standards and I can't do it. So it's very tough," he said. [#30]
- The representative of a majority-owned professional services firm indicated a recent movement to complete projects, resulting in an overestimation of the economic recovery. "There has been a momentum in growth of building projects but that has been evening out. I predict that there could be another small downturn before it recovers." [#34]
- An owner of a WBE-certified specialty contracting business stated that she does not believe the economy is going to pick back up even though everyone else around her predicts that it will. Her profit margins are still very low. [#38]
- When reporting on [specified city] construction market conditions, a Hispanic American female construction business owner stated, "We're pretty hungry here right now. There's no work in [specified city]. When we have one job we're like 'piranhas,' you know, in a tank, everybody's killing each other because there's no work." [PM#1]
- The Hispanic male representative of a minority contracting association reported, "Some of the [local] contractors [are forced to] look for work outside of [specified city]." [PM#4]

Others commented that they have started to see a slight upward trend in the market conditions. These businesses mostly reported cautious optimism:

- The female executive director of a professional services association reported that the current economy has been a very tough time for any firm in Arizona. "The firms that are still here are hanging in there and they have noticed some slight improvement, but nothing to be excited about."[#42]
- An Asian American SBA-, SBE-, DBE-certified male environmental consulting business owner commented, "Economics affect our business a little after it affects the rest; currently things are looking up, but we will see." [#62]
- The female owner of a WBE-certified professional services firm stated that the economic conditions now are better but not by much. [#33]

One business owner reported opportunity to expand. A Hispanic woman business owner reported that things have turned around, and they have now opened another office in a different state. [#55]

Business owners' experiences pursuing public and private sector work. Interviewees discussed their experiences with the pursuit of public and private sector work. Most interviewees indicated that their firms conduct both public sector and private sector work. [e.g., #1, #2, #3, #4, #5, #7, #9, #10, #11, #12, #18, #19, #26, #27, #28, #30, #34, #39, #60, AI#298]

For example, when asked at one public hearing if local contractors do both public sector and private sector work, several participants reported that do both. [PM#1, PM#2]

Some interviewees reported variability in where their work originates. For example, the white male manager of a publically-traded construction supply firm reported significant fluctuation in where the firm's work originates. For example, he indicated that when private sector work is plentiful, there is limited public work and vice versa. [#21]

A number of business owners reported differences between public and private sector work; and how those differences affected their firm's ability to pursue one business sector or the other. Comments included:

- An Asian American DBE-certified small business owner indicated that private customers require less paperwork. He indicated that public projects typically have more "hoops and hurdles." His firm cannot afford the administrative time and personnel to do the [necessary] paperwork [to pursue public sector work]. [#62]
- A Hispanic woman who represents a professional contractors association commented that private sector bids are a lot easier, and take far less time than public sector bids to submit. [#35]
- A Native American-owned engineering firm business owner indicated that he primarily performs private sector work. He indicated experiencing barriers to being a small company bidding prime jobs; therefore, he primarily does subcontractor work. He added, "If we were to prime a large government project, it would take more time management, it would make us overloaded and it would impact our other projects." [#63]

A number of interviewees noted that a slowdown in private sector work during the Great Recession resulted in more companies pursuing and competing for public sector work. Examples of those comments include the following:

■ The owner of a DBE-certified engineering firm indicated that work with private clients made up 50 percent of the firm's work in 2004. "During the leaner periods, starting in 2008 to 2012, we were leaning towards public [sector] work because there was hardly any private [sector] work. So you are talking about 80 to 85 percent [public work]." [#9]

 During the economic downturn, an Asian-Pacific American-owned DBE-certified engineering firm reported looking to small business set-asides for work with the [specified city]. [#19]

Some interviewees reported that they preferred private sector work over public sector work. Some of the comments indicated that performing private sector contracts was easier, more profitable, and more straightforward than performing public sector contacts. For example:

- The representative of a WBE-, SBA- and SBE-certified specialty-contracting business reported a preference for private sector work because pricing is less competitive. "[We do] mostly private [sector] work because recently, most of the public [sector] work has been really 'cutthroat.' The last road job that we did for [a county], we lost our butts on it and we could barely beat out the next person." [#14]
- The owner of a majority specialty-contracting firm preferred private sector work as it pays at job completion; whereas public sector pays up to 90 days post-completion. [#15]
- A Hispanic female representative of a professional contractor association said, "Working on government-owned jobs comes with more 'red tape,' so you have to pick someone who already has a lot of experience, unless you're willing to hold their hand throughout the process." She added, "It's no secret —government jobs are a 'pain in the butt." [#35]
- The male partner in a woman-owned specialty contracting firm reported no disadvantages to doing private sector work as compared with public sector work. For this firm, bonding made work with public agencies a challenge. [#24]
- A Hispanic owner of a trucking firm (non-certified) primarily works as a private sector prime contractor, as private sector provides ample work for his firm. [#52]

Some interviewees said that current market conditions are such that there are more bidders on government contracts and that competitors sometimes submit low-ball bids on public sector work. [e.g., #20] Examples include:

■ The engineering-related business partner reported some evidence of low-balled bids among his competitors. "I would almost call it unfair competition. I have a small business, an office, a truck, and things like that. But there are [specialty services providers] who lost their jobs in the recession and they work from their homes — so there are no overhead costs — and they basically can undercut the price of labor." However, he reported that low-balling could decline is his field with expanding work opportunities. [#2]

- The representative of a WBE- and SBA-certified specialty contracting business reported that she submitted a public sector subcontracting bid for \$3.2 million. A competitor undercut her bid by \$1.2 million. She recounted that, "We lost jobs with companies we had stable relationships with, with subcontractors who were desperate for cash flow who took jobs for the cost, materials and labor. There was no way they [the other subcontractor] could've added equipment in there [into the bid]; no way they could've added overhead; there was no way they could've had any profit." As an outcome, she added that the winning prime replaced the sub [that submitted a low-balled bid]. [#14]
- A representative of a woman-owned specialty services provider reported low-balling as a barrier to doing work. "Competition has prices so low that it is nearly impossible to win bids, when equipment is bought [and owned] for \$30,000 and they are renting for a penny-a-day, it is impossible to compete." [AI#27]

Other interviewees preferred obtaining public sector contracts because they were more certain they would be paid. Certainty of payment on public sector projects was a frequent comment among those business owners and managers. Examples include the following:

- A DBE-certified woman-business owner of a trucking firm prefers public sector work because the funds are more reliable than in the private sector. She commented, "You know the check is going to be good when it is coming from the government." [#64]
- An estimator (male minority) of a majority-owned specialty contracting firm stated, "I think one of the reasons why we like public work is that we know we are going to get paid every month. We are going to be able to pay our bills and subcontractors." [#48]

Some interviewees said that they preferred public sector work because it is more profitable. For example, the African American owner of a DBE-certified concrete subcontracting firm reported preferring public sector work as it pays better than private sector work. [#1]

One interviewee said that pursuing private sector work was preferable because he has experienced discrimination in the public sector. A Hispanic male owner of a non-certified firm providing specialty contracting business indicated that he primarily performs private sector work, because he has been unable to break into the public sector. He explained, "They look at me as a "Latino guy" most of the time, and even though they say it's not racism, it is. Because they look at me and they say, 'this guy is not going to perform, and if he performs, he's [going to] make a lot of money and we don't want him to make that much money.' They want to keep us down." [#30]

Some interviewees said that pursuing public sector work was more challenging because bonding is required. For some, bonding made it difficult to pursue work with ADOT:

■ The owner of a majority specialty contracting firm reported that when acting as a prime bonding is a challenge, particularly on ADOT projects. "Especially for ADOT when sometimes you have to have bonding, it can be hard on small businesses." [#15]

■ The partner in an Asian-Pacific American-owned DBE- and SBE-certified specialty contracting firm reported that bonding requirements prevented the firm from winning a contract with ADOT. He indicated that ADOT expects a lot from small businesses trying to submit bids and makes the bidding process too difficult. It only leaves a select few that can get their foot in the door. [#25]

Some interviewees with experience in both the private and public sectors identified advantages and disadvantages of private sector and public sector work. Examples include the following:

- The president of an engineering association said that members of his organization work as both prime and subcontractors. He commented that many agencies "do not understand the amount of work that a small business can do" and thus are often hesitant or unwilling to give a large contract to those businesses even though they are fully capable of delivering on such a contract. He admitted that he himself had been guilty of this while working at a small agency. [#57]
- A representative of a majority-owned firm said, "It is frightening sometimes working with ADOT." The work for ADOT is much harder and is scrutinized much more; "It's a headache I don't much care for." He added that he knows that if he messed up on an ADOT project, it would add to the stereotype that small-town businesses are unqualified. He also commented that his firm has trouble meeting ADOT's specifications. [#27]
- The owner of a DBE-certified engineering firm compared public and private sector work saying, "Private sector, I don't think they care if you are a DBE or not a DBE as long as you have the relationships and you perform well and give you the cheapest price. In terms of public [sector], the value is always the size of the projects." [#9]
- The CFO of an SBA-certified general contracting firm compared public and private sector arenas. "With public [sector] work, you know ... you are going to do the job. Whereas with private [sector] work, by the time you are [get the work] your client might not have the funding and the work is canceled." He also noted that public sector requires much more paperwork. [#12]
- Despite priming most private sector assignments, the Asian-Pacific American owner of a DBE-certified engineering firm reported working as a subcontractor when conducting projects with public agencies. The reported advantage of public sector projects included more paid hours than for the same work in private sector. [#19]
- The owner of a WBE-certified specialty contracting business stated that 25 percent of the firm's work is private, but there are months where there is no private work at all. She reported that timely payment is a benefit of working in the private sector because she does not have to wait for the agency to pay the prime contractor before receiving payment. [#38]

■ When evaluating methods for request for proposal, the representative of a female minority-owned engineering firm reported, "confusing and contradictory language; cumbersome preparation requirements; feeble scopes-of-work; short turnaround times for submittal" and "vastly different format requirements by each and every state and local agency" [AI#1]

C. Doing Business as a Prime Contractor or as a Subcontractor

Business owners and managers discussed:

- Mix of prime contract and subcontract work (page 25);
- Prime contractors' decisions to subcontract out work (page 27);
- Subcontractors' preferences to do business with certain prime contractors and avoid others (page 31); and
- Subcontractors' methods for obtaining work from prime contractors (page 31).

Mix of prime contract and subcontract work. Business owners described their experience as prime contractors and/or subcontractors.

Many firms that the study team interviewed reported that they work as both prime contractors and as subcontractors. [e.g., #7, #18]

- The owner of an Asian-Pacific American-owned DBE-certified engineering firm reported typically working as the prime for private sector work and as the subcontractor when working with public agencies. [#19]
- The leader of a minority trade association indicated, "80-90 percent of membership performs both private and public work, wherever they get the work." [#69]
- The owner of a WBE-certified specialty contracting business reported primarily acting as a subcontractor in public sector work, but also doing work as a prime in the private sector. She said, "If I could get bonding [for public work], I would bid tomorrow!" [#38]
- The minority owner of an engineering firm reported making efforts to establish long-term relationships with his subcontractors so that when the time came, he could be their subcontractor. [#7]

Some business owners and managers said that they mostly work as subcontractors because they do not have the capacity to bid on the size and scope of the entire project, or find it difficult to compete as a prime. Examples include the following:

■ The African American business owner of a DBE-certified concrete subcontracting firm said that he would need to establish a true office to consider pursuing prime contracting opportunities. [#1]

- For a WBE-, SBA- and SBE-certified specialty contracting firm, subcontracting means less paperwork and less competition. "Part of it has to do with the paperwork, and the other thing is if you don't know somebody, the chances of being offered one is pretty slim. There are so many contractors out there who try to do a lot of stuff. There are 'fly-by-night' guys, they're the guys who need work and are out there self-performing it. You can't compete with those guys. I would consider going after a prime contract job, but once we look [to] whom we are competing against, it's like we don't want to get into an ethical battle." [#14]
- The woman owner of a DBE-certified trucking firm commented that she experiences barriers in subcontractor work. She said, "Sometimes other trucking companies will come in and really lowball the rate ... You can't make money at some of the rates. In Phoenix it's an industry that is really bad about that, they work at a rate that's cheap." [#64]
- The female owner of a DBE-certified trucking firm reported conducting work primarily as a subcontractor, particularly when working with ADOT as the firm does not hold a contractor's license. She added that the firm is typically a "lower-tiered" subcontractor; the firm lacks the capacity (including truck fleet size) needed to secure larger projects. [#23]
- The female owner of a WBE-certified professional services firm reported that she works as a subcontractor because her business is not large enough to work as a prime. She added that larger firms have been building capacity through continuous work, which helps them act as a prime. ADOT has certain requirements for primes regarding bonding, insurance and expertise, which are easier for larger firms to meet. [#33]
- The female owner of a DBE-certified specialty contracting firm said, "I've pulled the paperwork [to get prequalified with ADOT to act as a prime contractor], but it becomes a financial issue for me to be able to able to fulfill the requirements." She does not have the extra cash flow to hire a CPA firm to audit her financial statements, which is an ADOT requirement for prime contractors. [#39]
- The representative of a majority-owned contracting firm indicated, "A small firm can't handle large projects." [AI#4]

The study team interviewed some firms that primarily work as subcontractors but on occasion also work as prime contractors. Some firms reported that they primarily work as subcontractors because doing so fits the types of work that they typically perform. For example, a DBE-certified specialty contracting business indicated that they act as a subcontractor. However, on rare occasions the same business acts as a prime when affordable project management and staffing is available. [#3]

Some other businesses reported being typecast as subcontractors or having difficulty breaking into the prime contracting arena, especially when conducting work for public agencies. For example:

- The minority owner of a DBE-certified engineering-related firm reported, "Because we almost always work directly with the general contractors, we're a 'subcontractor.' That's just 'kinda' what we've been dubbed as. It'd be nice to be able to change that, but I don't necessarily know how to do that." [#17]
- The Asian-Pacific American owner of a DBE-certified engineering business indicated that the firm rarely has opportunity to prime work conducted for public sector projects. The opportunities are limited to fulfilling "points" for other primes with awarded tasks being short-lived and intense with many late nights. [#19]
- The female owner of a DBE-certified specialty contracting firm stated that she works primarily as a subcontractor. When asked if this is by choice, she said that it is not, "We're defined with ADOT to bid things with a prime contractor." [#39]
- The male partner in a majority-owned trucking firm reported mostly subcontracting work, because trucking is typically designated as a piece of a larger job. [#61]
- When wanting to take advantage of prime contracting opportunities, an MBE- and DBE-certified specialty contracting firm reported challenges securing affordable staffing and project management to bid or conduct the job. [#3]
- The representative of a woman-owned engineering-related firm reported, "I do not have the financial strength to bid work as a prime because of bonding and cash flow requirements." [AI#59]

Prime contractors' decisions to subcontract work. The study team asked business owners whether and how they subcontract out work when they are the prime contractor.

Some prime contractors say that they usually perform all of the work or subcontract very little of a project. Examples of comments include:

■ The CFO of a SBA-certified prime contractor reported preference for conducting most work in-house. "When we have a sub, it's mainly because we cannot self-perform. Normally, if it is something we can self-perform, we would do it ourselves unless we are too busy and can't get to it all then we will look for subs." [#12]

The same prime added that with the 2010 reinstatement of DBE goals, he must use subcontractors whether he wants to or not. He reported, "It's just frustrating when you are required to use a firm because they are a DBE instead of selecting who you think is going to perform the best." He indicated that DBE goals could disadvantage small businesses that are not DBE-certified. [#12]

■ The representative of a majority-owned construction firm (certified as a small business with ADOT and the City of Phoenix) reported typically self-performing unless required by contract to subcontract a portion of the work (e.g., ADOT). [#20]

Some prime contractors require subcontractors to prequalify to conduct work on their teams. A majority specialty contracting firm owner reported that many primes require subs to prequalify. Although his firm does not require subcontractors to provide financials, many primes make that a requirement. Instead, this specialty contracting firm limits prequalification requirements to bonding agency names, insurance and different bonding rates, if applicable. [#48]

Many prime contractors indicated that they use the subcontractors with which they have an existing relationship. Both majority-owned and MBE/WBE-certified firms that use subcontractors reported on their use of subcontractors.

- A engineering-related firm owner offered that, in his experience, choosing subs is difficult for both large and small firms. He reported that the large firm where he used to work chose the same subcontractors with proven track records. "Asking for something to be done and then work coming back with an error or the schedule falling through ... [to avoid these challenges, the firm] chooses the same sub for any work." [#2]
- The representative of a majority-owned SBA 8(a)-certified engineering firm indicated that, when acting as prime, the firm selects the same subcontractor for its reliability and work quality. [#18]
- When priming projects, the Asian-Pacific American owner of a DBE-certified engineering firm uses subcontractors he has relationships with to perform work tasks that require specialized expertise. [#19]
- An estimator for a majority specialty contracting firm reported success from building relationships with DBEs and other subcontractors. "The internal goal is to give ourselves a competitive advantage by bringing in another set of resources that our competitors do not use. Our success for the past thirty years is our relationships and having repeat work with the DBEs and small businesses." [#48]

Similarly, a number of subcontractors said that it was very difficult to solicit business from certain prime contractors because those contractors automatically use the subcontractors they already know, or do the work themselves. Those comments included the following examples:

■ The vice president of a DBE-certified specialty contracting business reported bids trumped by a primes' preference to work with subs that they already know. "So, he [the prime] gets your number but he doesn't have a relationship with you, his relationship [is] with 'Brand X." He added that under this scenario, "Brand X" gets the work even when there are lower bids. [#3]

■ The CEO and operations manager of a DBE-certified design-engineering firm reported that subcontracting opportunities are relationship-based. They added that the common perception that DBEs are not qualified drives primes toward subcontractors that give them the confidence that the job will be done. [#10, #11]

They also indicated that primes meet goals parsing out smaller parts of projects, conducting in-house the more difficult tasks. This puts the firm at a disadvantage when seeking subcontracting assignments. [#10, #11]

■ For the representative of a professional services woman-owned firm, "It is very difficult to get prime contractors to subcontract with small contractors." [AI#82]

One interviewee reported that primes use certain types of subcontractors, and not others.

■ The female owner of a woman- and minority-owned professional services firm reported that she sees primes proposing to the meet DBE goals with very few DBE firms for several reasons. One is because the good faith efforts are not due for five days after the bid submittal but they did have to declare whether or not they were going to meet the goals at bid time. [#73]

She said that DBEs try to develop relationships with primes but primes may only use certain types of DBEs so, "it becomes an unattractive marketplace" to the DBE. She reported that the types of work that are subbed out are fence, rebar, guardrail, construction survey and layout and traffic control. She said that there are about ten construction DBEs and ten professional service DBEs that get the majority of the work. [#73]

Some interviewees reported that prime contractors prefer to have a few large subcontracted packages of work rather than manage many small subcontracts. This can negatively affect small subcontractors including MBE/WBEs and DBEs. Comments included:

- The Hispanic American owner of a DBE-certified engineering firm reported that breaking up large contracts into smaller pieces (unbundling) would help him. "It'd be nice to be part of a team to design a specific portion of design work for a highway project. But, like I said, most [prime] engineering firms already have that talent in-house, and they don't really need someone like myself on the design side, not the consulting, not the construction side" He added, "So maybe that's where the issue is. ADOT doesn't have a specific requirement for prime contractors or big consulting firms to hire a subconsultant like myself for very specific design work." [#13]
- The same engineer demonstrated how unbundling could improve opportunities for small businesses. "For civil engineering the design work can be broken up into very, very neat packages; and, in fact, internal to these large engineering companies they have their departments do pavement design, do drainage, do brick design, do river system analysis. Those sorts of things are very, very 'packageable.' You can take these aspects of the design process and package them into scopes of work for a department of a company or a firm like myself." [#13]

- The male CEO of a majority-owned SBE engineering firm reported, "It's better to have a piece of the pie than no piece of the pie." [#71]
- The female owner of a WBE-certified professional services firm said that she has banded together with other subcontracting firms in order to create a larger subcontractor presence. She added that this is the only way to get the attention of potential primes and agencies, including ADOT. [#33]
- At one public hearing, a representative of a majority-owned engineering firm reported that ADOT sometimes limits the number of subcontractors a prime contractor could bring onto a project. [PM#5]

Some DBE contractors felt that prime contractors only used them when there was a DBE requirement on the job; limited their participation to the set goal; or, parsed out only bits and pieces of a project. Others reported little or no success in securing subcontracting opportunities as part of the DBE program, and their confusion as to why. For example:

- When there are DBE contract goals, the minority owner of a DBE-certified engineeringrelated firm reported that primes sometimes parse out minute portions of projects to DBEs rather than giving them a more complete subconsulting package. [#17]
- The Asian-Pacific American president of a DBE-certified professional services firm reported that primes only use DBEs when forced to do so. [#21]
- The Hispanic American owner of a DBE-certified engineering firm reported not securing work as part of the DBE program, "I have no idea. I've been on the list, I've had a couple calls, but nothing has ever led to any work." When asked to elaborate he responded, "I really don't know. The information on my company, who I am, is out there. My qualifications ... I have no idea why." [#13]

The same engineer was asked if his lack of participation resulted from his not being knowledgeable of DBE opportunities, he responded, "I don't think there's enough motivation for large engineering companies to hire a DBE firm like myself and carve out part of the design work and hire me to do it." [#13]

■ A representative of a DBE-certified supplier reported facing barriers when trying to secure work with prime contractors. "What is the point of having the [DBE] certification ... if the general contractors don't even acknowledge the importance of the certification?" [WT#5]

The same supplier added, "I am not asking for a 'free ride,' I am asking for an opportunity to provide quality [materials] at competitive prices." [WT#5]

Subcontractors' preferences to do business with certain prime contractors and avoid others.

Many owners and managers of firms that sometimes work as subcontractors indicated that they preferred to work with certain prime contractors.

Interviewees frequently mentioned speed and reliability of payment as reasons to prefer certain prime contractors and avoid others. For example, the owner of a DBE-certified engineering-related firm reported the desire to avoid some prime contractors who pay only after 90 days. [#17]

In addition to prompt payment for their work, some firm owners and managers said that they preferred prime contractors that are organized and easy to deal with, and treat them fairly. For example, the owner of a WBE-certified specialty contracting business reported a preference for a prime contractor that is easy to deal with, "They ... let you get the job done." Conversely, she added that she avoids another prime contractor because of its demands for paperwork and micromanagement of her work. [#38]

Subcontractors' methods for obtaining work from prime contractors. Interviewees who worked as subcontractors had varying methods of marketing to prime contractors.

A number of business owners reported that they actively market to prime contractors. Those businesses reported that they sometimes identify prime contractors from bidders' lists, planholders lists, at pre-bid or pre-proposal conferences, or through outreach events.

- A representative from a Hispanic-owned general contracting firm commented, when working as a subcontractor, his firm learns about opportunities from the planholders lists released by ADOT. From that, he submits bids to the primes. If they do not hear back from prime contractors, he stated, "We know we are being played, which happens a lot."[#50]
- The minority owner of a engineering-related firm reported to actively market to prime contractors; however, marketing presented some challenges. "Over time you give people your business cards and you're on their email list and they will tell you about a conference ... DBE conferences, networking events, or whatever it may be. It costs money to go to those things and they do charge a fee. Some small businesses can't attend so we have to pick and choose to see which ones are beneficial." [#5]
- The female owner of a DBE-certified specialty contracting firm reported that often she will see a project on the ADOT website and contact the prime contractor directly to offer her [specialty contracting] bid. She indicated success getting subcontracting work using these methods. [#39]
- The owner of a WBE-certified specialty contracting business reported checking websites for upcoming projects combined with networking and receiving invitations to bid from others. [#38]

Some business owners reported routinely being solicited for bids from prime contractors. Comments include the following:

■ For a DBE-certified specialty contracting business, "Nine out of ten [times] they [primes] are calling because they have to match the percentage and this [a certified subcontractor] is an easy fit for them to gain the percentage that they need." [#3]

The same specialty contractor reported that the conferences through ADOT's DBE Program has helped market their firm. [#3]

■ The female owner of a DBE-certified specialty contracting firm who looks for subcontracting opportunities on ADOT's website reported getting notification directly from ADOT when a prime contractor is looking to hire a DBE company to contract work. Sometimes prime contractors also contact her directly. [#39]

Some businesses reported being solicited by primes for work, but not being given reasonable time to respond. For example, the representative of a DBE-certified engineering firm reported that some primes do not provide ample amount of time [for subcontractors] to respond. He emphasized that they give very short notice. [#16]

Marketing can be difficult for some small businesses. For some, including the female owner of a DBE-certified engineering firm, the primary barrier to marketing is limited time. [#70]

D. Keys to Business Success

The study team asked firm owners and managers about barriers to doing business and about keys to business success. Topics that interviewers discussed with business owners and managers included:

- Relationship-building (page 32);
- Employees (page 34);
- Equipment and materials (page 36);
- Financing (page 38);
- Bonding (page 42);
- Insurance (page 45);
- Timely payment. (page 47);
- Licenses and permits (page 49).

Relationship building. Many business owners identified relationship building as a key component to the success of their businesses. [e.g., #66]

Some businesses reported success, building relationships through quality work. Many emphasized work quality as a key factor. For example:

- A minority design-engineering firm reported, "First we do good work. We have been able to respond and be agile to clients' requests and get good quality products out." [#4]
- A representative of a professional engineering association remarked, "Basically, you have to have a good engineering staff and be efficient in doing what you're doing and be cost conscious and effective in working on a project. If you've got the cost and the schedule and the scope all down, then you're going to be well-liked." [#36]
- The representative of a WBE-, SBA- and SBE-certified specialty contracting firm reported placing high value on business relationships. For example, the firm replaced concrete three times to satisfy an architect. She noted that for that customer "... we are the first company that is asked for. He's offered me some general contracting activities." [#14]
- When asked about keys to success, a Hispanic American owner of a non-certified firm providing electrical services reported that he has many repeat clients because he does high-quality work and has established good relationships with his customers. [#30]
- The owner of a WBE-certified specialty contracting firm stated that the firm maintains good relationships with customers. She said, "Once you use us, you will 'never' not use us. We are small but are very good at what we do. We are fair and honest. Endurance is a wonderful thing. We have been around for a while." [#38]
- The female owner of a DBE-certified specialty contracting firm said, "I believe that a lot of [success] has to do with the integrity of the business and the integrity of the work that you're doing." She also listed "the ability to work well with others." Sometimes things get "heated" and there are disagreements with ADOT or prime contractors regarding the specifications of the job, but you have to be able to deal with disagreements and stand behind your work. [#39]
- The female owner of a DBE- and SBE-certified engineering firm stated, "Every project will get you the next project. A firm must do good work to be successful." [#70]
- The Hispanic female owner of a non-certified specialty supply company stressed that having a strong relationship with customers was vital to her firm's success. She added that dependability is part of what has allowed her business to thrive. She said, "If there's an emergency, a customer knows they can contact us ... We like to stick to normal business hours, if we have to go past that, we do." [#40]
- The Native American owner of a DBE-certified engineering firm indicated that quality was important to a qualifications-based industry, "In my industry, it is qualifications based. You've got to bend over backwards." [#6]
- Providing quality construction and safety are the keys to success for a woman-owned SBA-certified heavy construction firm. [#18]

Examples of comments include:

- The owner of a majority specialty contracting firm reported building business relationships through good communication. "You want to make sure you call them back." [#15]
- The executive director of an engineering organization stated, "You have to build relationships; getting out there and letting people know who you are." [#42]
 - He also stressed that a strong website is important because prospective clients are going to look at the businesses' websites. [#42]
- An African American female representative of a woman- and minority-owned professional services firm reported that the key to getting information on "jobs in progress" is to "be diligent and build relationships." She indicated, "It's who you know as opposed to what you know." [AI#211]

Some business owners reported difficulty building the relationships their businesses needed to succeed.

■ For example, the partner in an Asian-Pacific American-owned DBE specialty contracting firm reported challenges to building the relationships needed to secure subcontracting work as a minority-owned business. The partner indicated difficulty "if you are not a popular company," as primes looked to firms they already know or those who would "provide discounts under the table." [#25]

Employees. Business owners and managers shared many comments about the importance of employees, and barriers they faced related to hiring and hiring protocols.

A number of interviewees indicated that high-quality workers are a key to business success, and for some hiring good employees is a struggle. [e.g., #36, #66, #49] For many, good employees are keys to business success including the following:

- A representative of a large majority-owned construction business said, "We hire 'go-getters.' We are large enough to afford some research tools like Gallup to prescreen employees. We know who is representing the business name." [#41]
- A male representative of a transportation builders association remarked, "It comes down to reputation, the quality of work, the quality of workmanship, and what a company is willing to invest into their employees not only to keep them safe but also to keep them engaged."[#31]
- The female owner of a DBE- and SBE-certified engineering firm stated, "It comes down to good people." [#70]

- A representative of a majority-owned materials supply firm commented their relationship with their employees is good. He commented they have a "mom and pop" type of business with most of their employees have worked for them for 10 to 20 years. He added that he often hires relatives of current employees. [#27]
- Hiring quality employees and paying well helps a minority-owned design-engineering firm retain committed employees. "We include a bonus off of a monthly basis to offset the guys' insurance and things that they pay on for their wives or spouses. In order to get good quality people, we have to give them a good pay." [#4]
- The male partner of a majority-owned trucking firm affirmed the need for good relationships with employees. "I treat our employees well. I am not going to hire somebody and then jerk them around. I have to make sure if I hire someone I can keep them around because I do not like laying people off." [#61]
- For some small businesses participating in the Tucson listening session, keeping employees was also a barrier. For example, a minority female-owned engineering firm owner suggested that it was her experience that business owners grow from working first in that industry for many years. However, she allocated tremendous resources to train staff only to have them leave her small business for a larger, Fortune 500 firm. "Some want Fortune 500 companies! "

Many business owners and managers said that developing and maintaining relationships with their employees was paramount to achieving success. For example:

- Principals of a minority-owned design-engineering firm work in concert with their employees. "We have what is known as 'working principals.' We are owners of the company and we do day-to-day work. We aren't just marketing all day; we actually are doing the work." [#4]
- The CFO of an SBA-certified general contracting business reported, "We have a good [employer-employee] relationship. We are in the same community. We see each other outside of work too." [#12]
- The minority owner of a engineering-related business said that relationship building implies a willingness to take risks. "As far of the employees right now, we have a longstanding relationship. They want to see an owner or boss that is willing to take risks and find opportunities that are outside of the norm if the norm isn't working." [#5]
- An estimator for a majority specialty contracting firm reported that he teaches and recruits young engineering college students with a goal of encouraging hard work, curiosity and motivation. [#48]

■ The representative of a majority-owned professional services firm said, "Our business strives to provide opportunities to [those] who are really growing and succeeding in the market." He commented that people who come in and work for the firm know that they have the opportunity to become an owner. "It helps retain workers and it helps with the transition of ownership," he said. [#33]

Several interviews discussed barriers they faced to finding, keeping and training employees, which is sometimes difficult for smaller businesses. For example:

- For example, the engineering-related business owner predicted that down the road he would face the challenge of increased staff. However, as a small business owner, he said that he could not meet the demand of a larger payroll to retain those employees. "Now you would have a payroll, your margins are different. My income is not going to double, it is going to be [increased by] 20 to 25 percent. We are going to need more money if I have five employees." [#2]
- The representative of a majority-owned materials supply firm added that as a small business in a rural area, they sometimes have trouble finding good, qualified employees as their workload increases. [#26]
- A Native American business owner indicated that his relationship with his employees is good but when the firm is slow, he struggles to make payroll to keep them. [#63]
- A Hispanic female owner of a specialty contracting firm commented getting employees properly trained and "up to speed" was one issue she struggled with, particularly because the work is high risk, and the employees work in roadways. [#55]

A number of interviewees reported that economic conditions have reduced the pool of potential employees, as many have left the state. For example, the representative of a majority-owned construction firm (certified as a small business with ADOT and the City of Phoenix) reported difficulty finding employees as many moved out of Arizona during the downturn. [#20]

Equipment and materials. Business owners and managers discussed equipment and materials needs.

A number of businesses reported the importance of having the right equipment and materials for operating their businesses, and keeping it operational. For example:

- The female owner of a DBE-certified specialty contracting firm indicated that equipment is "pretty critical." She reported a need for keeping her equipment running and in good condition to make the work easier for her employees. [#39]
- A male partner of a majority-owned trucking firm reported keeping trucks operational as a key part of his business. Mistreatment of equipment is a concern, "A loader can dump and make the whole truck bounce ... or he can lay that material in there, it's just a matter of consideration." [#61]

- The leader of a minority trade association indicated, "A business needs safe equipment capable of doing the job." [#69]
- A representative of a large Hispanic construction firm indicated having good equipment allows the firm to control their own work. [#66]
- A male business owner of a small majority-owned engineering firm reported that faulty equipment leads to faulty work, "A man is only as good as his tools." [#72]

Some interviewees said that they own all their equipment. Examples include:

- The vice president of a minority-owned specialty contracting business indicated that the first step for the firms' owners was to buy its first piece of equipment critical for start-up. Overtime the business increased its assets from one piece of heavy equipment to ten, while being careful to avoid overextending themselves. [#3]
- The CFO of an SBA-certified general contracting firm stated, "We have our own trucks, dump trucks, loaders, construction equipment and paving equipment." [#12]
- A Hispanic American female construction business owner reported, "All of my equipment is paid for" [PM#1]
- The principal of a design engineering firm reported investing in new desktops and laptops, and the latest AutoCAD software to run his business. [#4]
- The representative of a WBE-certified specialty contracting firm indicated that the firm mostly owns the equipment they need with the exception of equipment infrequently used. [#14]

However, more business owners pointed to expensive equipment, or not having the equipment needed for their operation, as barriers. Some indicated cash reserves too low to purchase the equipment outright and limited access to financing. For example:

- The Hispanic American owner of a specialty contracting business indicated, "Sometimes I don't have the equipment [I need]." [AI#243]
- The representative of a white woman-owned specialty contracting firm reported not having the capital needed for more equipment, "I need more capital for equipment ... and we don't get paid for 90 days so we need working capital." [AI#96]
- A woman-owned DBE-certified trucking firm owner indicated that she did not have difficulties in the past, but recently has had to return trucks. She added that she only buys trucks with savings now so she does not have to seek financing. [#64]
- A woman-owned trucking firm that had not turned a profit in eight years reported not having the resources to acquire the trucks they needed to turn a profit. [#22]

■ A majority-owned 8(a)-certified engineering firm reported that new businesses face disadvantages acquiring needed materials and that its years in business make it easy to secure the pricing and credit needed for materials. [#18]

Some interviewees stated that acquiring needed equipment is a barrier to doing business with ADOT or other public sector agencies. Comments include:

- The male partner in a woman-owned specialty contracting firm indicated that it is not "worth the risk" to purchase new equipment to meet some ADOT prequalification requirements. [#24]
 - Additionally, in absence of guaranteed "contract longevity," the need to purchase new equipment is a barrier to bidding work with ADOT. [#24]
- A female representative of a local public agency reported the need to consider required equipment when setting a DBE contract goal. Some contracts where equipment purchase is required may limit opportunities for subcontractors. [WT#3]

Financing. Many interviewees discussed the importance of access to capital. As with other issues, interviewees' perceptions of financing as a barrier depended on their experiences. To some it was a barrier, and to others it was not.

Many firm owners reported that obtaining financing was important in establishing and growing their businesses (including financing for working capital and for equipment), and surviving poor market conditions. For example:

- A Native American-owned engineering business indicated that financing and bonding topped the list, as his business could not survive without them. [#6]
- A public hearing participant (non-minority male) said that undercapitalized businesses are at a disadvantage. [PM#3]

Some business owners reported that they had tapped personal resources to finance their business operations, and the associated stress. For example:

- A representative of a woman-owned DBE-certified trucking company commented that she started her business with inheritance money. [#64]
- The minority owner of a engineering-related business reported having to "borrow from our [house and] line-the-credit card and put cash in the business to handle business operations." [#5]
- A representative for a majority-owned specialty contracting firm reported knowing of small businesses that put their house or life insurance on the line to secure bonding. [#48]

- The Hispanic American female owner of a non-certified materials supply company reported "it's really hard to get credit," until you're established, which generally takes three to four years, and up to seven. She noted that new businesses often have to get personal credit and loans, rather than getting them in the company's name. [#40]
- The female owner of a DBE-certified trucking business reported tapping her homeowner's mortgage to buy trucks, do truck repairs and meet payroll for the business. "Now the trucks are paid for, but the house is not." [#23]
- The female owner of a DBE-certified specialty contracting firm said that access to credit was "very important" to the success of her business. However, she added that paying off her debts and her line of credit made a huge difference in lowering her "stress level." She indicated that because of her family's personal finances, she had little trouble obtaining a line of credit, "but it's still scary to sign on the dotted line that you're personally responsible." [#39]

Many interviewees said that obtaining financing was and continues to be a barrier for businesses. Interviewees reported difficulty finding new financing, or having recently lost lines of credit that they had secured in the past.

- A DBE-certified Asian American consulting business owner found it hard to get a line of credit for operating his business. [#62]
- The president of a women's business organization said, "The capital piece is interesting because many women-owned businesses don't need as large of a loan [as other businesses] ... loans of the smaller size are harder to come by." [#59]
- The Hispanic male business owner of a non-certified firm providing specialty services said, "I'd like to talk to somebody about financing assistance," commenting that it is very difficult to find out about existing opportunities for financial assistance.
- A representative of a minority business organization indicated that the economy has been very challenging for its members, especially concerning access to capital. He commented that his members tend to have creative and innovative ideas; yet, if they have high overhead cost and no capital to support that cost, they struggle to stay in business. He reported that with increasingly stringent bank lending requirements, members continue to struggle with securing the necessary capital to advance and grow their businesses. [#67]
- When asked to describe the challenges, the African American owner of a DBE-certified firm reported financing as a challenge. "The biggest challenge, number one, is finance and not having a credit line even built up. So, that is challenge number one." [#1]
- The representative of a white woman-owned transportation construction business reported having difficulty securing the level of financing she needed to expand. She stated, "I would like to expand, but the banks don't help like they used to. The lines of credit are too small." She explained that her firm needed larger loans. [AI#64]

- For the representative of a white woman-owned specialty contracting firm reported that the challenge for new firms is working capital. "Trying to get working capital is difficult." [AI#182]
- An owner of a DBE-certified engineering-related firm reported difficulty in finding financing in absence of tangible forms of collateral; the firm's assets include primarily intellectual property. [#17]
- The female owner of a WBE-certified professional services firm said, "I went through a whole series of things when we bought the office and it was like pulling teeth in Tucson. The bank that we had dealt with for years wouldn't loan us an 'SBA."" [#33]
- A Hispanic American female construction business owner said that she never had a problem getting a loan up until 2009. "I never ever got turned down for a loan. After that [2009], I have not been able to get one loan. I can't get a loan to save my life. All of my equipment is paid for, my house is paid for ... still can't get a loan. The banks won't touch me."[PM#1]
- The principal of a design engineering firm reported losing his line of credit. "Another thing about financing is establishing a line of credit. We had a line of credit with a big bank and unexpectedly the bank, without announcing, closed our line credit" [#4]
- Some business owners and partners reported tapping supplemental income to finance their businesses. For example, the partner in an Asian-Pacific American-owned DBE specialty contracting firm reported that she kept her specialty contracting business running by cleaning houses on the side. [#25]
- A Hispanic American business owner said that when he tried to get a business loan through the SBA they never returned his call, because, he reported, "They don't care about small businesses." He added, "How am I going to turn into a million [dollar]-sized business if I can't get the opportunity to get a decent job?" "The [financial] information is not publicized. They keep it within the closed doors of the people they know. It's not available to everybody." [#30]
- A male business owner of a small majority-owned engineering firm reported, "We all *are* experiencing an economic downturn A line of credit is tougher to obtain The banks are not lending money in particular to small businesses." [#72]
 - He added that a bank his firm did business with dropped the firm because they wanted portfolios of \$1 million or more as opposed to the firm's \$400,000 portfolio. [#72]
- The leader of a minority contracting industry group and public hearing participant reported limited business financing available to startups. [PM#4]
- The leader of a local small business association indicated that it is almost impossible to gain financing without having a pre-existing financial history. [#56]

- The representative of a majority-owned small professional services firm reported that getting credit is a challenge because banks tend to be "suspicious of small businesses." He said, "When you do a revolving line of credit or something similar, they really get into your business and how you manage it. They make you hit certain financial targets. We had credit lines originally but it became exceedingly difficult during the great recession to retain those. Now we have a financial mechanism that we use to establish a sufficient cash reserve where we don't need a credit line to make ends meet." [#34]
- A representative of a Hispanic trade organization remarked that since the economic downturn, large businesses are recovering well but small businesses are continuing to struggle, in part, due to limited access to capital. He added limited access to contracts and capital have had a strong negative effect on small businesses, and indicated that businesses in Arizona faced greater barriers than businesses in other parts of the country. [#51]

As a consequence, small businesses typically work as subcontractors on ADOT projects because the contracts are usually very big and have require large bonding and financial capabilities that small businesses have difficulty obtaining. [#51]

- The Hispanic American owner of a non-certified firm providing electrical services said that it is a challenge to access credit and he has difficulty getting bankers to return his calls. Additionally, the loans he receives are not enough to help his business grow, because banks tend to have little confidence in unproven companies and are more likely to lend money to more established companies. [#30]
- The female owner of a DBE-certified specialty contracting firm reported that all small businesses, whether they are minority- or women-owned or not, have difficulties with finances. [#39]
- A leader of a minority contracting industry group and public hearing participant said "there's not a level playing field" regarding "the financial side of the house, trying to get loans and stuff that you need, lines of credit." He reported, "That's where a lot of people feel they don't have that level playing field, because they can't come up with that financing or credit that they need in order to bid those projects." [PM#4]

He also said, "Banks were not lending for a long time, so some of these small companies had to turn to the factoring [selling accounts receivable to a third party at a discount] side of the house." [PM#4]

■ The president of a national women's professional business organization said, "We are continuing to hear from our members that access to customers and capital are still challenging for them." [#59]

A few representatives of majority-owned firms reported that obtaining financing was not a barrier. Firms reporting few barriers typically had established relationships with lenders or business longevity. For example:

- A representative of a majority-owned firm said that the firm has not had problems accessing credit in order to purchase more equipment. He also said that they have a relationship with two different banks to attain credit without trouble. [#28]
- A majority-owned SBA 8(a)-certified engineering firm reported that its "years in business" make it easy to secure financing for materials. [#18]

Some interviewees reported that avoiding financings the key to their success, or survival during the economic downturn. For example, some reported debt-free objectives:

- The Operations Manager of a DBE design-engineering firm (holding Small Business Administration 8A Certification, Self-Certified Veteran disabled, Veteran small business, and Priority One on the Navajo Reservation) indicated that the firm was loan- and debt-free using credit only when leasing equipment. [#11]
- The representative of a Hispanic-owned specialty business reported no particular issues obtaining financing, but highlighted the importance of conservative spending practices. He claimed that many of his competitors that purchased lots of new equipment while experiencing success went out of business when the economy slowed. On the contrary, his company survived by having limited long-term debt and using discretion when purchasing. He indicated that survival in the downturn is not having large debts. [#44]

Bonding. Public agencies in Arizona, including ADOT, typically require firms working as prime contractors on construction projects to provide bid, payment, and performance bonds on public construction contracts. Securing bonding was difficult for some, particularly newer, smaller and poorly capitalized businesses.

Many interviewees indicated that bonding requirements adversely affected small businesses and their opportunities to bid on public contracts. For example:

- The male partner in a woman-owned specialty contracting firm reported bonding as a barrier to working with public sector agencies. [#24]
- A representative of a specialty contracting white woman-owned firm reported, "It is difficult to get bonding for a small business." [AI#89]
- The African American business owner of a DBE-certified subcontracting firm reported that bonding created opportunities for playing games. He said, "I don't trust the contractors that I do business with to get a bond. If the contractor wanted a bonding job, I would be willing to do the job with him but there are too many games played with bonds." [#1]
- The representative of a WBE-certified specialty-contracting firm reported more bonding challenges since the recession hit. "Because of the recession, bonding has been difficult when dealing with paperwork. You have a year where you are marginally profitable and then things are picking up but your past two years is what they are looking versus what you have now. That makes a difference. I have a project now where I pay 3 percent on a

- bond, where before the recession we were [in] such good shape that they wouldn't even ask me for a bond." [#14]
- For an SBA-certified general contracting firm, bonding and insurance made conducting work as a small business challenging. [#12]
- For DBE-certified specialty contracting business, bonding requirements limited the company's ability to go after the largest contracts. [#3]
- With regard to bonding and insurance requirements, the female owner of a WBE-certified professional services firm said that it does not make sense to lay out more for these requirements than she gets paid for the job. [#33]
- The Hispanic American owner of a specialty contracting firm indicated that bonding is a big disadvantage when bidding public sector work. [#44]
- An estimator for a majority specialty contracting firm reported, "If you can't pay your bills, you can't get bonding. If you have unused lines of credit and all of a sudden you start pulling from [them] and companies are watching your billings and they see if it starts moving when they normally don't you're accessing lines of credit when you shouldn't ... they pull your bonding." [#48]
- A representative of a local public agency indicated a need for re-assessing bonding requirement on public sector projects. [WT#3]
- For an SBA-certified general contracting firm, bonding and insurance requirements made conducting work as a small business challenging. [#12]
- A member of a minority trade association, who specializes in serving Native Americans, singled out bonding as the biggest financial barrier, saying that having to factor such large bonds into a bid makes it almost impossible to compete with a large company that already has the required bonding.[#53]

A number of businesses reported issues connecting capital and financing to bonding. For these interviewees, finances and bonding were intertwined (sometimes including personal assets).

- A Hispanic DBE general contractor expressed it can be difficult to obtain bonds without a healthy financial statement. However, getting a healthy financial statement requires contracts that a firm can get only if they have appropriate bonding. [#50]
- The minority owner of an engineering-related business saw bonding as a challenge. "The bonding companies basically own your life. They make you sign your life away, your wife's life away and they make you put cash in [to secure the bond]. It was difficult getting started ... you over extend yourself and now you have bonding, and money [borrowed from his mortgage and line of credit] just sits in the bank collecting dust and you're paying a bunch of interest elsewhere to keep your bond lined up ... there are some people who can't do that." [#5]

A representative of a majority-owned specialty contracting firm reported, "Our government is not aware of some of the issues with getting bonding." He added that he while at an ADOT vendor/mixer one of the ADOT officials reported that ADOT could help businesses obtain bonding. However, when asked how small businesses attain bonding, some businesses replied that they had to put their house or life insurance on the line. [#48]

Some business owners further explained the connection between personal assets and the ability to secure bonding. For example, the owner of a minority-owned engineering-related business reported the need to borrow from personal assets to secure bonding. He explained, "We had an unfortunate case. "Borrow from our [house] [and] line-the-credit card; put cash in the business, because that is what they want to see [to secure bonding]." [#5]

Several interviewees reported that bonding required by ADOT, prevented them from moving from bidding, or moving from subcontracting to the role of a prime. Examples include the following:

■ For the owner of a WBE-certified specialty contracting business, bonding posed a challenge. She cited an example of an ADOT job her firm bid on and won but later lost due to her lack of bonding. She said, "Most of the [industry-specific] specialty contracting jobs are anywhere from \$5,000 to \$10,000 tops. So why did they require this huge bond? I could have bonded each job individually with cash!" She later added, "If I could get bonding [for public work], I would bid tomorrow!" [#38]

This same owner added, "Nobody wants to bond. It's like banks, they don't want to lend—why would they? They rather charge you 19 percent on your credit card rather than take a risk on bonding." [#38]

- The female representative of an industry association indicated, "Bonding capacity can limit a business' ability to contract with ADOT as a prime. If you work as a subcontractor, your bonding requirements are a lot lower." [#68]
- The representative of a majority-owned SBA 8(a)-certified engineering firm reported indicated that ADOT's bonding requirements limited the firm's ability to bid on certain big projects. When asked if there are any challenges in being an SBA, she responded, "Being too small, [to secure] a bond for a big project. ADOT puts out \$200 million projects." [#18]

Other interviewees reported little or no problem obtaining bonds, or that bonding was not required in their industry. [e.g., #44, #45, #58] Comments include the following:

- A representative of a majority-owned firm indicated that they use the same bank to get bonds that they do to get credit. Consequently, they have not had any issues securing bonds. [#28]
- The owner of a DBE specialty-contracting business reported having secured approval for bonding up to \$300,000, but never having to bond. [#8]

- The Hispanic male owner of a non-certified firm providing electrical services said that he has not been required to get bonding because the general contractors have always had the bonds. [#30]
- The Hispanic female owner of a non-certified specialty supply company stated that, as a supplier, her firm is not required to have bonds. [#40]
- The representative of a majority-owned professional services firm stated that because the business does not do general contracting services, the business has never needed bonding. [#34]

Insurance. The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to business success.

Some interviewees identified challenges obtaining insurance when working with hazardous equipment or under other conditions.

- A minority-owned specialty contractor reported difficulty with securing insurance. "Insurance is a huge nut to cover especially in our line of work ... [it] is hazardous to be in. It can be burdensome, especially when you have to come up with 25 percent down or 30 percent down in Arizona when it isn't during the busy months." [#3]
- The female owner of a trucking firm reported that although they had insurance, the firm found it difficult to meet some insurance specifications when hauling particularly expensive loads. [#22]
- For a white woman-owned transportation-related consulting firm, securing errors and omissions insurance is a barrier to doing business. [AI#73]
- The representative of professional services white woman-owned firm reported, "The insurance level required by ADOT" is a barrier to seeking work. [AI#156]
- The female owner of a WBE-certified professional services firm reported that many public agencies do not understand professional liability. In her line of work, there are small risks because the firm does not build anything that "could collapse later." She said she did not know why she has to meet the same insurance requirements as another firm who may assume higher risk. [#33]

Many interviewees said that they could obtain insurance, but that the cost of obtaining it, especially for small businesses, was a barrier to sustaining their businesses or bidding certain projects. Comments include:

A minority-owned engineering firm reported, "Insurance is a nasty element of overhead because my ... liability insurance, my workman's comp insurance probably ran close to \$10,000 a year. As long as it is a requirement then you need to be prepared for that financially." [#6]

- The representative of a DBE-certified engineering firm indicated that the high cost of professional liability insurance and that it kept increasing as the business expanded. He reported that professional liability is the firm's biggest expense. [#16]
- The female owner of a WBE-certified professional services firm stated that it is very difficult to obtain insurance as a small business. The upfront insurance costs for one job are too much and outweigh how much a business can earn for just one job. [#33]
- The female owner of a DBE-certified specialty contracting firm said that insurance and worker's compensation is an issue. She pays a high rate for licensing in the State of Nevada, and after the firm finished the large job in Nevada she tried to return to the worker's compensation company in Arizona, but they would not take her. She said that she had to stay at the high rate from the large job in Nevada. [#39]
- A white woman-owned professional services firm stated, "The insurance requirements are extraordinarily large for [a] small contractor. It is the single largest business expense I have and I must have, if I am a prime or sub." [AI#157]
- A minority-owned contractor reported that ADOT's requirements for insurance documentation make working for them difficult. He also noted that prime contractors often require even greater insurance documentation than ADOT. [TLS]

Some reported that although they carried insurance, they did not have the level of insurance required to conduct work on a public agency projects, or did not have access to the required coverage. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm did not have the level of insurance required to conduct work on a public agency project in Pima County. [#19]
- The Asian-Pacific American president of a DBE-certified professional services firm reported facing insurance coverage that his carrier did not offer, limiting his opportunities for work with public agencies. [#21]

He added that on design-build projects, "Our liability, as a design engineer, is not the same as the [prime] contractor. But because it is under the same contract, the designers have to have the same liability coverage ... we cannot afford it and it is unnecessary." He indicated that as long as he meets ADOT's requirements, he does not need to meet the coverage required by prime contractor. [#21]

Some interviewees reported no instances in which insurance requirements or obtaining insurance were barriers. [e.g., #7, #8, #30, #34] For example, the Hispanic female owner of a non-certified specialty supply company reported that her firm needs certain specified insurance but that obtaining that insurance was not difficult. [#40]

Timely payment by the customer or prime. Full and timely payment by customers or prime contractors is critical to business success. Non-payment and slow payment by the customer or prime contractor was reported by some as a barrier in both public and private sector work. It can also exacerbate issues for small businesses related to access to capital.]

A few business owners and managers said that their assurance of payment was better for public sector contracts than private sector work. Some had favorable comments about ADOT. Examples of such comments include the following:

- A representative of a majority-owned firm said that they always receive payment eventually for public sector work. They have much more difficulties with payment in the private sector. [#26]
- The Hispanic owner of a trucking firm reported payments of three to four months in arrears for private sector work. [#52]
- A representative of a DBE-certified minority-owned business remarked that payment on public projects is more reliable than private projects. [#29,#32]
- The vice president of an MBE- and DBE-certified specialty contracting business suggested that working in public sector reduces the risk of not getting paid and that payment is not a concern when working for ADOT. [#3]
- A Hispanic female business owner indicated that her firm is always paid in a timely fashion.[#55]
- The representative of a woman-owned engineering-related business indicated, "Working with ADOT prime contractors gives me assurance I will be paid." [AI#59]
- The engineering-related business partner reported timely payment as more regular when doing public sector work; he used ADOT as an example. "They [ADOT] pay on time." He added, "Overall, what I could observe, ADOT was always really fair. That's why people are always working hard to maintain their contracts [with ADOT]." [#2]
- Regarding timely payment, the female owner of a DBE-certified specialty contractor said, "It has gotten so much better." She added that ADOT recently started a system in which she receives a notification once a month that allows her to report whether or not she has been paid on time. She indicated that ADOT became aware that subcontractors were having a difficult time getting timely payments and they started this program. This system has been a huge benefit to her. [#39]

Some interviewees said that slow payment by the customer is an issue. Examples of such comments include the following:

- A Native American business owner stated his challenges with timely payments, "That's one thing about working with Tribes is that we must meet certain milestones before they pay you therefore, we send an invoice every month. We may have finished 30 percent, and sometimes they want 60 percent or 90 percent and sometimes there is pressure. This is what we have been told by the architects we contract with, so the architect cannot pay us until they get paid."[#63]
- The Hispanic American representative of a specialty contracting firm reported, "The hardest thing is not getting paid in a timely fashion in 90 percent of our job[s]. We are the lowest bid, but [still] we are the bank." [AI#247]
- An estimator for a majority specialty contracting firm reported that "Some of their [ADOT's] REs (Res Engineers) could use a refresher. The REs who are in charge of the project and [inspectors] do not understand how cash flow is important to the contractor." [#48]

Many interviewees said that slow payment by the prime contractor is an issue and can be damaging to companies in the transportation contracting industry. Interviewees reported that payment issues may have a greater effect on small or poorly-capitalized businesses. Examples of such comments include the following:

- A representative of Hispanic trade organization highlighted the importance of timely payments to small businesses. He commented that small businesses often have limited financial assets, and therefore that delays between when a subcontractor pays for supplies and when the prime pays it for the work can cause substantial hardship. "There has to be an alignment between payables timing in order to be a win-win."[#51]
- The representative of a WBE-certified specialty-contracting firm reported that many primes are slow payers. "I think a lot of contractors push the limits of the [Arizona] Prompt Pay Act." [#14]
- "It is difficult to collect as a subconsultant until the prime is paid in full," reported the representative of a white woman-owned engineering firm. [AI#76]
- The owner of an engineering-related firm reported that when working with some prime contractors it is a challenge as payment extends up to 90 days out. [#17]
- "It's difficult to maintain work, when prime contractors string out [payment] 160 days. Your fuel costs are on a two-week, 30-day turnaround and extended to 165 days and it's costing ... interest," reported the representative of a white woman-owned trucking company. [AI#90]

- A minority-owned engineering firm reported, "There are prime contractors that sit on your money for over a year. When you try to get assistance from ADOT, it is not very helpful." [#5]
- A female executive director of a professional services organization said she has knowledge of untimely payments, for example, "I heard from one of our member firms that they have ADOT contracts sitting there over a year old and they have not been paid a dime because the prime hasn't been paid. It hurts them big time because he has already done all the work and paid his employees. He is still waiting."[#42]
- The female owner of a WBE-certified professional services firm said, "I really find it amazing that they think that small firms can run 30, 60, 90 days without payment. Or, in the case of if they send the payment direct to the consultant/prime, that takes another 30 days, and they think that we can do that." [#33]
- The owner of a WBE-certified specialty contractor reported that she is often waiting for the prime on a project to be paid before she receives payment, and that this can take over 30 days. She commented that this makes it difficult for her make payroll and pay taxes. She added, "The DBE is supposed to make that better, but if the GC has not been paid then they do not have to pay you." [#38]
- The partner in an Asian-Pacific American-owned DBE specialty contracting firm provided an example of incomplete payment on an ADOT project. The prime contractor that this firm was conducting work for held out \$2,000 that the subcontractor never recovered. [#25]

Licenses and permits. Certain licensing or other approvals are required for both public and private sector projects.

Some business owners said that obtaining licensing or other approvals creates a barrier. For example:

- The owner of a majority-owned specialty-contracting firm reported that, although he works on a wide variety of jobs, licensing requirements precluded him from seeking certain opportunities. [#15]
- The female owner of a DBE-trucking firm identified requirements for ID badges (i.e., fingerprinting and background checks) as a barrier for doing airport work, for example. [#23]

A number of business owners and managers reported that licensing was not an issue for them. Examples of those comments include the following:

- A majority-owned specialty-contracting firm indicated that licensing is relatively simple.
 [#15]
- The owner of a WBE-certified specialty contracting firm stated that she has no problems with licensing. [#38]

E. Potential Barriers to Doing Business with Public Agencies

In addition to barriers such as access to capital, bonding and insurance that may limit firms' ability to work with public agencies such as ADOT, interviewees discussed other issues related to working for public agencies. (Some appeared to be barriers and some were not.) Topics included:

- Learning about prime and subcontracting opportunities with public agencies (page 50);
- Prevailing wage requirements (page 52);
- Prequalification requirements (page 54);
- Other unnecessarily restrictive contract specifications (page 56);
- Advantages for larger firms in the bidding process (page 57);
- Experiences with ADOT regarding any barriers and recommendations for improving ADOT's bidding or other processes (page 59), and
- Improving other ADOT procedures (page 59).

Learning about prime and subcontracting opportunities with public agencies. Interviewees discussed opportunities for firm owners and managers to identify public sector work and other contract opportunities, and to market themselves.

Many business owners and managers identified straightforward ways to learn about public sector work. [e.g., #20, #39] For example:

- The principal of a engineering firm gave the example of ADOT. He reported although not receiving direct solicitations from ADOT; "I go on to the ADOT website probably at minimum twice a week and look at bid opportunities. You see what projects they have and once you go on there, there is a list of primes and they show who has looked at it." [#4]
- The female owner of a DBE-certified trucking business reported using ADOT and City of Phoenix websites and pre-bid meetings to learn about public sector work. [#23]
- Since obtaining certification, a minority-owned specialty contracting firm reported increased email solicitations (e.g., from City of Tucson). [#8]

- The owner of a DBE-certified engineering firm indicated that invitations sent to DBEs help present opportunities to market his firm (e.g., marketing events, conferences, open houses to showcase services and products, and professional gatherings). [#17]
- The representative of a majority-owned 8(a)-certified engineering firm reported constant networking, and meeting attendance at ADOT-sponsored meetings to keep on top of solicitations, but needed more time to conduct the background research required to respond to solicitations. [#18]
- The CEO and Operations Manager of a DBE-certified engineering firm indicated that the firm looks for prime and subcontracting opportunities through established business relationships, ADOT and federal websites, bid list subscriptions, industry associations, and direct marketing. [#10, #11]
- A female owner of an SBA-certified heavy construction firm reported that the firm just redid their website as a way to market the firm, which has been working well. [#18]
- A African American subcontracting firm owner noted that as a DBE "you are already marketed." He added, "Primes and ADOT send you invitations to bid and tell you who is bidding." [#1]
- The Asian-Pacific American president of a DBE-certified professional services firm indicated, "A lot of it is about finding out about [public sector] projects ahead of time, going to the primes who are pursuing the projects and convincing them the benefits of taking us on as a sub." [#21]

Several small business owners reported barriers when attempting to identify or secure certain contract opportunities with public agencies, including ADOT. For example:

- A Hispanic female representative of a professional contractors association indicated that she believes learning about prime opportunities is a barrier to doing business with public agencies. She remarked the process is "time-consuming" and that "the average contractor will probably get a headache, because they know it's going to be lots of red tape, lots of meetings you have to go to, and it's just a pain. It's not the same as dealing with the private sector." [#35]
- A partner in a small engineering-related firm said that he would have no idea how to market to ADOT. However, he stated he would try to learn how if opportunities arose to work with public agencies. [#2]
- A Hispanic American female construction business owner said that her contractors association once got notice of many of the local bidding opportunities but now gets almost no information about those opportunities. [PM#1]

Some businesses reported challenges with marketing. For example:

- The business owner of a DBE-certified engineering-related firm indicated that a shortage of time gets in the way of marketing his business. He added that marketing is a challenge for small businesses (regardless of industry). [#17]
- The Hispanic American owner of a DBE-certified engineering firm reported challenges in marketing due to lack of "how-to" knowledge. [#13]

Prevailing wage and other wage-related requirements. Contractors discussed prevailing wage requirements that government agencies place on certain public contracts. They also discussed other wage-related issues.

Many business owners and representatives indicated that prevailing wage requirements present a barrier to working on public contracts. [e.g., #67]

- The partner in an Asian-Pacific American-owned DBE specialty contracting firm named prevailing wage requirements as one reason the firm stopped bidding government work. [#25]
- According to a representative of a Hispanic trade organization, prevailing wage requirements are challenging for some small businesses with an already "thin profit margin." [#51]
- A Hispanic representative of a minority-owned DBE contracting business stated that they only had one or two jobs that required prevailing wages, but there were challenges. He said, "It was a little high [compared] to what we usually bid. It is extra work having to report the payments and also pay the correct amount to the workers."[#29, #32]
 - A Hispanic female representative of the same business reported having a need for a mentor for managing prevailing wage issues. [#29]
- Prevailing wage requirements was a barrier for a African American-owned DBE-certified subcontracting firm. The business owner said, "Guys are getting overpaid for skills." He also recommended the need to better define requirements, "Prevailing wage needs to be revised because there is not a clear definition of some of the things ... in the prevailing wage segment of the paperwork." [#1]
- A female Hispanic representative of a professional contractors association stated that prevailing wages "create paperwork." She added that although prevailing wages benefit workers, they rarely benefit firm owners and contractors because they have to deal with more paperwork and raise the prices of their bids to cover the higher wages. [#35]

- The representative of a WBE-, SBA- and SBE-certified specialty contracting firm reported challenges keeping staff happy when some, but not all, are assigned to a project with prevailing wage requirements. "When we have a prevailing wage project, it creates a lot of animosity inside our business because those who weren't working on our job feel like they are getting stepped on. I can tell you that guys who have been working together for ten years, everybody else knows what everybody is making." [#14]
- The owner of a WBE-certified specialty contractor reported that prevailing wages sometimes doubles payroll, which creates a significant burden. She said, "If it is a tight bid and you have problems, you are done." [#38]

Several firms said that complying with prevailing wage requirements was not a barrier when working on public projects. [#66] For example:

- A Hispanic DBE general contractor stated prevailing wage requirements are not an issue, saying that requiring everyone to pay the same wages actually levels the playing field. [#50]
- The representative of a small business-certified majority-owned construction firm reported, "I seek out prevailing wage jobs. I think it evens the playing field. The people we employ, I think they are the best I think every job should be prevailing wage." [#20]
- The leader of a DBE engineering firm indicated that the firm worked with prevailing wages "all the time" and found them to incentivize workers. [#10]

A number of professional services firms reported no challenges to paying prevailing wages. For example:

■ The president of an Asian-Pacific American-owned DBE-certified professional services firm indicated that the business pays competitive salaries comparable to other national firms, so prevailing wage requirements present no challenge. [#21]

Some businesses suggested that other labor and wage-related requirements present a barrier when working on public contracts.

■ For example, a minority specialty contractor reported that "the biggest challenge is the certified payroll and meeting the added requirements (payroll procedures, reporting) in working with public jobs." [#3]

The same contractor spoke of his confusion around complying with the Tribal Employment and Rights Office (TERO). "It is another group that you go through. Does it mean I have to hire a tribal work force and how does that work with payroll or certified payroll? That can be intimidating to small businesses." [#3]

Prequalification requirements. Public agencies, including ADOT, sometimes require construction contractors to prequalify in order to bid or propose on government contracts.

Some interviewees from construction firms reported that prequalification was difficult, cumbersome and confusing, or invasive, including ADOT's process. [e.g., #50] For example:

- At one public hearing, the Hispanic American male owner of a construction firm reported that ADOT prequalification is a barrier for minority- and women-owned firms to do business with ADOT. [PM#14]
- The male partner in a woman-owned specialty contracting firm indicated that prequalification required by ADOT stopped the firm from bidding some work. "It seemed like [prequalification was] too much and we couldn't do it." [#24]

The same specialty contractor added, "I just think they [ADOT] need to even the playing field as far as making the qualifications easier for smaller companies to get in the door, and make the contract longevity justified if equipment needs to be purchased." [#24]

- The female owner of a DBE-certified specialty contracting firm reiterated that she has financial difficulties meeting auditing requirements in order to be a prime contractor with ADOT. [#39]
- The female representative of a DBE-certified trucking firm called the prequalification process "cumbersome." [#58]
- ADOT prequalification has been a challenge for a representative of a majority-owned specialty contracting business. She said that ADOT has denied their subcontractor prequalification applications over several years, without much explanation. The firm has been unable to meet prime contractor qualifications because they do not perform all of the tasks associated with prime work. [#26]

This female representative of the majority-owned contracting firm added she spoke with an ADOT representative regarding the prequalification denial. She understood that she could go through a review process, but received no details on the process. [#26]

- Regarding difficulties related to prequalification requirements, the Hispanic female representative of a professional contractors association stated, "More paperwork." She added that prequalification creates barriers to workers that cannot speak English, since those workers cannot complete the tests that are mandated by prequalification. [#35]
- The owner of a specialty contracting firm reported not being comfortable submitting financial statements as a requirement for prequalification. [#8]
- For a Hispanic American representative of a woman- and minority-owned specialty contracting firm, prequalification is a barrier to bidding work. She said, "The prequalifying requirements prevent us from making bids." [AI#249]

- A minority-owned business owner said, "ADOT prequalification is almost impossible. You go through it, you have to do 'X' amount of paperwork and then they give you the littlest amount as possible. They don't trust you to do the job, even though I am doing larger jobs out-of-state. I have proven references and history. They require a level of financial statements ... that my bonding company doesn't even require." [#5]
 - He added, "We have done projects from beginning to end and they [ADOT] only prequalified us in certain areas. [We had no explanation why] they would not give us construction prequalification." [#5]
- The leader of a minority trade association commented, "I know that a lot of small businesses have trouble with prequalification because they don't want you to know their finances. It's all about pride." [#69]

Some representatives of engineering and other consulting firms were critical of prequalification processes in the public sector. Some specifically mentioned barriers posed by ADOT's process.

- The representative of a white woman-owned professional services firm seeking prequalification stated, "We don't want to hire an accountant just to do the ADOT paperwork." [AI#163]
- The owner of an engineering-related firm (DBE-certified) reported that prequalification requirements geared more toward contractors than professional services makes it difficult to respond. [#17]
 - This interviewee added that drug testing became a challenge, as a recent contract required all employees to be tested even though only one or two staff members worked on the project. [#17]
- For the Asian-Pacific American owner of a DBE-certified firm, prequalification software requirements (specifically MicroStation) prevented him from submitting bids on some projects. [#19]
- A member an engineering organization remarked prequalification requirements are minor for other areas and agencies, but the prequalification requirements from ADOT can be very difficult and time consuming. He noted that this is a relatively new problem, saying that up until a few years ago, prequalification requirements from ADOT were simple and straightforward. [#57]
- Bidding is a challenge for a majority-owned business because they have problems getting prequalified and therefore cannot bid projects that interests them. [#27]
- The Hispanic male owner of a non-certified firm providing specialty services said that prequalification requirements are impossible to meet because the city expects a certain amount of money ahead of time, in the form of a check. [#30]

However, some interviewees indicated that prequalification was not a barrier to pursuing public sector work. Examples of those comments include the following:

- The representative of a majority-owned professional services firm stated that there were no barriers with the prequalification requirements. [#34]
- The owner of a WBE-certified specialty contracting firm reported that she has not seen issues with the prequalification requirements. [#38]

Some described that primes often require their subcontractors or suppliers to prequalify, and reported on that protocol. For example:

- The estimator for a majority specialty contracting firm reported that primes require subs to prequalify. However, his firm tries to make the process less demanding. He reported, "Compared to companies our size, we have smaller prequalification requirements. We would like to know as much information [as reasonable], but we don't need the subcontractors' financials. We will ask for bonding agency names, insurance, different bonding rates, if applicable, and similar to our alternative delivery owners might ask us."[#48]
- A representative of a white woman-owner supply company reported, "It is difficult to start business with new customers we prequalify with." [AI#74]

Other unnecessarily restrictive contract specifications. The study team asked business owners and managers if contract specifications, particularly on public sector contracts (and ADOT), restrict opportunities to obtaining work.

Many owners and managers indicated that some specifications are overly restrictive and present barriers. It appears that some businesses choose not to bid due to what business owners and managers perceive to be overly restrictive contract requirements. Examples of those comments include the following:

- The female owner of a DBE-certified specialty contracting firm reported having had disagreements with ADOT over job specifications. [#39]
- A Hispanic female business owner of a materials supply firm stated they have run into issues with the material specifications. She said she does not understand the testing because sometimes one lab will give one result and another test will show a different result that impacts her business. [#65]
- A representative of a majority-owned firm said, "It is frightening sometimes working with ADOT." He reported having trouble meeting ADOT's specifications.[#27]

- The representative of a majority-owned professional services firm stated that the firm has to change the way they do business because, "The auditing in ADOT is obnoxious The requirements are not in the Federal Accounting Regulations (FAR). Nobody audits overhead cost but ADOT. It would be great if it was a simple audit that followed the rulebook. ADOT audit stated that they did not like the way we did our employment set up, and if we don't change it, they would not count it but FAR only said it has to be performance based and an established mechanism." [#34]
- A women-owned design firm reported the need for a full-time office manager just to manage ADOT requirements. Having a history of subcontracts on ADOT projects meant "lots of paperwork." "Overhead analyzed and the audits just for ADOT work, we just can't get over how much ADOT rules our lives. We're typically subs to larger civil firms and we're also finding that on ... these on-calls that are requested by the primes ... [we're required to fill out] different paperwork [for each prime]. It's difficult to have that consistency across the board, all the primes wanting ... similar pieces of information ... about typical overhead ... in different formats." [TLS]
- The representative of a majority-owned professional services firm said, "In the local agencies, there was a trend to produce many indemnification terms. As a consultant community we actually had to make a bill pass to make these indemnification [terms] insurable because clients could do damage, but the company would be forced to pay for it. So in September they had a law pass to fix the indemnification term." He also said that he does not see this problem much with ADOT. [#34]

Some businesses reported no barriers resulting from restrictive specifications. For example:

- As all contractors need to meet certain specifications, the owner of a majority specialty-contracting firm reported no barriers. "I don't see how that is a barrier because everybody has to follow the same specifications whether you are a small business or a large business." [#15]
- When asked if she believed contract specifications were difficult, the female owner of a WBE-certified professional services firm said that you usually know what you need to do and how to lay out the costs associated with it. [#33]

Advantages for large firms in the bid process. Interviewees shared a number of comments about bidding processes.

Many business owners said that bidding procedures presented a barrier to obtaining work, and put larger firms at an advantage.

■ The African American female representative of a woman- and minority-owned professional services firm reported, "The challenge is larger firms. When submitting quotes, the larger firms are chosen first. Larger firms advertise principals even if they don't use them. It's hard to obtain work against larger firms." [AI#210]

- "Most agencies prefer larger firms, and don't want to deal with smaller ones like ours ... the same people keep getting the big jobs," reported the representative of a white woman-owned professional services business. [AI#106]
- The female owner of a WBE-certified professional services firm said that it is difficult for her to market her firm to ADOT because they [ADOT] already have an on-call team. She no longer bids on those jobs because she figured out that the same two firms were getting the jobs. [#33]
- An engineering-related business partner reported a challenge for small businesses to prepare bids, when they do not know when and if they can expect a contract award. [#2]
- The representative of a professional contractors association commented that private bids are a lot easier and take less time [than public sector bids]. [#35]

Amount of "paperwork" presenting a burden on small firms. Some interviewees commented that the amount of ADOT and other public agencies' "paperwork" presented a barrier to their firms.

- An Hispanic representative of a minority-owned DBE-certified business stated that when they are doing work with a public agency, there is so much paperwork, and at times they have been be asked to fill out the paperwork more than once. [#32]
- A female Hispanic representative of a professional contractors association indicated she
 is aware of "red tape, paperwork, and lack of communication" as barriers to doing work
 with ADOT.[#35]
- For engineering-related business partner, "The amount of 'paperwork' is mind-boggling. Just to renew the contract with ADOT takes months of preparation. Just to make sure everything is in perfect order." Timely submittal of required documents created an additional barrier for the business. [#2]

Non-price factors public agencies or others use to make contract awards. Public agencies select firms for some construction-related contracts and most professional services contracts based on qualifications and other non-price factors.

For example, when bidding on an alternative-delivery project the representative of a majority-owned SBA 8(a)-certified engineering business felt unprepared for the process. She reported, "We read the specifications and the second half of the submittal ... technical and price. We were short-listed, which means you go to the next step. We submitted a price based on our experience. It was 'us and another firm' that bid really close together and the third firm that bid really low. The firm that bid really low won. We went in and talked to the client to find out how that could happen. We found out that we were not required to do those things in the bid when they wrote the specs in the RFQ. But we would not have known that unless we had a job with the client before. The guy that won knew that the client would not hold him to the specifications. That was unfair." [#18]

One individual commented, "Also set up contracting so only larger unionized firm can qualify... My experience is that agencies write the parameters for professional services selection so large multi discipline, multi license large budget home office gets the leg up on all selections." [WT#1]

Experience with ADOT regarding any barriers and recommendations for improving processes.

In addition to factors common to contracting among public agencies in Arizona, interviewees had many comments specific to ADOT processes.

■ The female owner of a DBE- and SBE-certified engineering firm reported that ADOT's unclear design and review standards posed a challenge to the firm. [#70]

Some interviewees said that ADOT was as easy to pursue contracts with or work for as other public agencies. For example:

 A representative of a majority-owned specialty contracting firm reported that ADOT is very good at disseminating information, and allowing ample response time for bidding.
 [#48]

This same representative added, "We used to be a small business at one time, so we ask ourselves how we could help these [small] businesses. As far as the information that ADOT gives, we know that small businesses have access to the same thing. Except, we get feedback instantly from the projects that we bid on. For small businesses, lack of feedback is a barrier like finding out how their numbers work. What has helped is that ADOT posts the bid tabs electronically. I always tell our subs and DBEs to check the bid result on ADOTs website." [#48]

With regard to ADOT's bidding process, the same representative added, "They [ADOT] give you a substantial time within the following week of the bid to get your DBE information in. They also take consideration of the contractor's time that it takes to do those things." [#48]

Improving other ADOT procedures. A number of business representatives and business owners commented on or made suggestions for improving other ADOT procedures. Many discussed a need for streamlining ADOT processes. For example:

- "They should have a website or a hotline to help small businesses through the [prequalification] process," stated the representative of a white woman-owned professional services design firm seeking prequalification. "The negotiating process is very difficult, because we don't have enough accounting information. We can't understand what information they need their requests are 'too jargony' ... at this time we are not prequalified." [AI#163]
- Time commitment and lengthy bidding procedure is a challenge for the representative of professional services firm seeking work with ADOT. "On our most recent bid for ADOT, the process was lengthy ... it costs more money to prepare it ... and they decide to pull those bids and we end up losing." [AI#117]

- The representative of a majority-owned specialty contracting firm indicated wanting "bid notification directly from ADOT" to make bidding opportunities easier. [AI#3]
- The female owner of a DBE-certified professional services firm stated, "As I have thought about the process of trying to get to ADOT jobs (as a prime or sub) and with other agencies. I remembered that several of the many small firms (in the southern Arizona Area) thought at one time that it would be good to have a certified list and for the agency to go straight down the list then start again when it comes to jobs. If in the case of archaeology someone already had a large job then you would go down the list to the next firm. Or the firm could be chosen randomly from a pool of firms that had not received work the last time. It is truly an on-call contract and it spreads the work out. If a firm has difficulties then ADOT has a mentoring program in place to help. This is one the ways you can build up small firms. [WT#2]

Otherwise, the process is the same old business as usual, and frankly you will have conducted all these interviews for naught. The same firms will continue to get the work because they have been able to develop their staff and corporate bases with the on-call contracts over four to eight years. It is comfortable for agency billing departments because they don't have to get used to smaller firms and the need for short billing cycles 30 to 60 days versus 90 to 120 days. Just a thought. It probably won't fly because most of the agencies are adverse to thinking outside the box, and the larger firms that have had the benefit of this system will probably lobby hard not to change the status."

F. Other Allegations of Unfair Treatment

Interviewees discussed potential areas of unfair treatment, including:

- Denial of opportunities to bid (page 60);
- Bid shopping and bid manipulation (page 61);
- Attitudes about minorities and women (or MBE/WBE/DBEs) and unfair treatment based on race, ethnicity or gender (page 65); and
- Any "good ol' boy" network or other closed networks (page 68).

Denial of opportunity to bid. The interview team asked business owners and managers if they had ever been denied the opportunity to bid.

Some interviewees said that they had been denied the opportunity to bid on projects; some specifically attributed the denial to discrimination. [#23]

At the start of his business, an engineering-related minority business owner reported an invitation to a prime's office then denial of opportunity to conduct subcontracting work, once the prime contractor saw his skin color. [#5]

- A representative of an Hispanic trade organization stated the high bar that has been set in terms of prior experience, financial health, and bonding limits that are required to qualify to bid effectively deny most DBEs the opportunity to bid on most projects.[#51]
- The partner in an Asian-Pacific American-owned DBE specialty contracting firm reported being refused work because of being a small business. [#25]
- Despite its being "on point," the female owner of a trucking firm indicated that denial of business opportunities was based on the limited number of trucks in their fleet. [#22]
- A representative of a DBE-certified supplier provided written testimony after attending the Phoenix public hearing. She reported that her company faced barriers to contacting other firms that would need the materials they supply. She was encouraged with the offers of assistance from general contractors at an ADOT DBE conference, but found the following barrier. "I came back and started to call the estimators which were in charge of several projects that were mentioned at the Conference. Some of them would not even supply a list of specialty contractors I could contact to attempt to partner with them. For those that supplied a list, I call the landscape contractors and I had no success." [WT#5]

Many interviewees indicated that they had not ever been denied the opportunity to bid For example, the owner of a WBE-certified specialty contracting business stated that the firm was never denied opportunities to bid. [#38]

Bid shopping and bid manipulation. Business owners and managers often reported being concerned about bid shopping and bid manipulation and the opportunity for unfair denial of contracts and subcontracts through that practice.

Many interviewees indicated that bid shopping and bid manipulation was prevalent in the Arizona construction industry. Examples of comments include the following:

- The owner of a DBE-certified engineering and construction firm commented, "Based on my experience, subs selected by general contractors are usually beaten down for a final contract price or a general will find a violation of their contract to hold back on the subs contract." "I'm sure there are well meaning Generals out there, just haven't found one." [WT#6]
- The Hispanic male owner of a non-certified firm providing electrical services said, "They [primes] shop around a lot. Probably in the course of the first six months of the year, I bid close to \$3 million and I got nothing." He added that he bid on a job for the National Guard but they wanted him to do it for half. He feels as though most of his issues have to do with firms not wanting to pay him as much as he deserves. [#30]

- The representative of a WBE-, SBA- and SBE-certified specialty contracting firm submitted bids on a streetcar project in Tucson two years ago. "I was told that I have great numbers, but they lowballed that and said they had to do [the work] in-house. When I submitted my numbers doing side work on the streetcar project, what I got back is that even though I was a low bidder they couldn't afford it. You bid 16 jobs and they tell your numbers are good but they can't afford [it]." [#14]
- In reference to bid shopping, a representative of a large majority-owned firm commented, "I cannot prove it, but wonder that it exists." [#41]
- The female owner of a DBE-certified specialty contractor said that she often waits to bid on a project until the morning of, because she does not want anyone shopping her bid—unless she already has a good relationship with the prime. [#39]
- The leader of a minority trade association reported, "It happens where a company with a successful bid is later asked to reduce their bid. They are asked to cut now, but on the next job they can recoup it; that next job never comes." [#69]
- The female representative of an industry association indicated, "It [bid shopping] happens everywhere." [#68]
- The owner of a WBE-certified specialty contracting firm reported that bid shopping occurs. She said, "Sometimes we are so close and when someone comes out of the moon you have not heard of, it has to happen." [#38]
- A public hearing participant (non-minority female public representative, said that she has a lot of family that are small business owners. "If they can help it, they don't bid government jobs." She added, "If I put in an honest bid, somebody else puts in a lower bid and they get the job and they can't do the job for that bid, and they end up charging the same thing that I would have charged in the long run but my bid was correct to begin with." [PM#2]
- A Hispanic American female construction business owner reported, "There was a lot of bid shopping going on by the bigger guys. You know, you'll bid a job and I'll bid a job, and then after the numbers are in they'll shop that number, and they're ruthless." She went on to say that "that's one of the reasons we're thinking about getting out of the business; we're tired of it." [PM#1]

She added, "[My husband] spends two weeks bidding his job. He finally gets it done, he gives it ... to the general contractor, and she's, like, 'oh, hey, can you do that for one half of that?' So, here, I just wasted two weeks of my time bidding on this job, lost money on this other job because I can't supervise my guys, and that's going on every day in this town. And it's really frustrating." [PM#1]

This business owner went on to report that bid shopping emerged with the recession and that "now, that goes on every day in this town." [PM#1]

- The Hispanic male representative of a minority contracting association and public hearing participant agreed, reporting, "Yes, that [bid shopping] has happened and I've heard it from numerous different sources." [PM#4]
- A representative of a Hispanic general contracting firm commented bid manipulation does occur, saying that on several occasions primes have encouraged his firm to lower their bid by claiming a competing firm had submitted a lower bid when he knew that the competing firm's bid was in fact higher. "There needs to be better policing on ADOT's part." [#50]
- A male representative of a transportation builders association commented bid manipulation is much more common in horizontal work, while bid shopping is more common in vertical work. Both are barriers, but said that there's no way of stopping it. [#31]

Owners and managers of engineering firms also reported that bid shopping or bid manipulation affects them. Some reported submitting bids, then being "undercut" by bid shopping, or not getting work when the job commences. Examples follow:

- The minority owner of an engineering-related firm reported that a prime accepted his bid for its proposal then bid-shopped after award to cut the price by 50 percent. [#5]
- The engineering-related business owner reported having heard, while employed at another firm, that a large firm underbid its competitors while planning to make add-ons throughout the course of its contract with ADOT. [#2]
- The owner of a DBE-certified professional services firm stated, "This is another problem, when [specialty contracting] is part of the bid, public contracts require listing only those [subcontractors] whose bid is over a certain percentage, the contractors often don't list the [specialty contractor that has provided an estimate] and then go bid shopping after if the win the bid Specialties for which DBE/WBE/VBEs have submitted bids for should require listing on bid day. Bid shopping after awards is 'illegal,' but a very large practice in public works, and hard to prove." [EM#1]
- A minority-owned design engineering firm principal reported having joined a team during bidding and award, only to be dropped post award because of cost. "I was part of their team and they have been selected to do the work. After the city council approved them, I submitted my numbers to them. About a week later they came back and said, "We are not going to go with you; we are going with someone else, they came in with \$200,000.' The process was to submit a design fee to the owner. The owner says, "We accept your fee. Here is notice to proceed, keep going.' Or the client comes back and says, '... your fee is a little high; let's see if we can work this thing out.' This process never happened." [#4]

- The leader of a DBE-certified engineering firm reported, "You have to be careful when you're a subcontractor. Some of the large companies will take advantage of you because they'll promise everything during the bidding process; you'll give them your price, and then at the 'get-go' they'll go out and shop your price to try and get it lower." [#10, #11]
- The representative of a DBE-certified engineering firm (with a Native American business owner) observed that in the Native American sector, projects not won by Native American-owned businesses sometimes resulted in certain Native American-owned businesses receiving a second "last look" opportunity to participate. [#16]

Some interviewees reported other unfair "shut out" tactics to prevent them bidding and contracting opportunities. For example:

- A Hispanic American female construction business owner (PM#1) was "shut out" of a job by a prime contractor. "I have a relationship with the owner but because the owner didn't talk to me, he went to the general contractor, the general contractor capped me out of the job and gave it to their friend."[PM#1]
 - The same business owner added that there was a contractor's association meeting in [specified city] last year that included a number of large government agencies. "About 120 people came out. This room was full over there. I don't think anybody came away with anything from that, because, I ... for myself ... I have contacted someone three and four times ... never returned my call." [PM#1]
- A representative of a specialty contracting company reported in the Phoenix public hearing that the firm has difficulty receiving traffic control work from Phoenix area cities. "There is a stranglehold of the project by police departments and it seems that we cannot get any work." [PM#23]

Some interviewees reported strategies for avoiding bid-manipulation. Some business owners and managers reported taking precautions to avoid falling victim to bid manipulation:

- The Asian-Pacific American president of a DBE-certified professional services firm reported no experience with bid shopping. When the firm teams with a prime, it secures a team agreement defining workscope, percentage of work to be performed and total cost. [#21]
- For a minority-owned specialty contractor, bid manipulation poses no threat. The Vice President reported that clear bidding defining deliverables prevents bid manipulation.
 [#3]

Attitudes about minorities and women (or MBE/WBE/DBEs) and unfair treatment based on race, ethnicity or gender. Several interviewees indicated that minorities, women, or MBE/WBE/DBEs are the subject of stereotyping or similar unfair treatment based on race, ethnicity or gender.

Many of the comments concerning presence of discrimination pertained to race and ethnicity.

- One interviewee said that pursuing private sector work was preferable because he has experienced discrimination in the public sector. This Hispanic male owner of a non-certified firm providing specialty services indicated that he works primarily in the private sector. He has been unable to break into the public sector. He explained, "They look at me as a Latino guy most of the time, and even though they say it's not racism, it is. Because they look at me and they say, "This guy is not going to perform. And if he performs, he's 'gonna make a lot of money and we don't want him to make that much money.' They want to keep us down." [#30]
- The Hispanic American representative of a minority-owned heavy construction business reported knowing of "a lot of discrimination against minorities [and] women." He reported, "No place to go for help ... just blown off token service." [AI#221]
- Stereotypical attitudes are a problem of perception which they [minority business owner] are "working to overcome" on a weekly basis according to a Hispanic representative of a trade organization. He added that that it was up to professional and governmental organizations to "change the tone" and work to include small minority-owned businesses in the contracting process.[#51]
- The vice president, non-owner of the minority-owned specialty contracting business considered stereotyping a problem for minority-owned business owners. Where he is employed, it is often assumed that the business owner (a minority) works for him (a non-minority). [#3]
- The Hispanic male owner of a specialty contracting firm reported, "The attitudes are a little harsher toward minorities." He also stated that inspectors are more likely to assume minority contractors are going to have done something wrong. [#44]
- A minority owner of an engineering related firm reported difficulty getting a foot in the door. "Dealing with contractors was always difficult and as a different colored skin, not all doors are open for you. As a person of color, you can always feel discrimination." [#5]
- The principal of a design-engineering firm mentioned ADOT, as an example. "In the fabric of the entities, there is an inherit resistance. ADOT had to give money back because they were not meeting DBE goals. It is a culture in ADOT where African Americans aren't getting promoted to move up the ranks." [#4]
- The Hispanic owner of a trucking firm (non-certified) reported unfair treatment and derogatory mannerisms from others. He explained, "It is what it is." [#52]

The African American owner of a DBE-certified firm described stereotypical attitudes that could lead to discrimination against MBE/WBEs: "White female owned businesses are going to be treated different. That is just the human nature of the business. A black man's business will probably get treated a whole lot different and it isn't going to be to his advantage." He added, "I have seen everything from looks to gestures, hearing the 'n-word' and different things from Hispanics to whites." [#1]

The same African American business owner reported differences in the way white and African American contractors are treated by building inspectors. For example, he reported that if an African American business owner asked the same question as a white business owner, an inspector would treat the African American business owner less favorably. He stated that inspectors seek the good ol' boy network. "It is what inspectors seek. It is difficult to work with. When you [an African American business owner] have the same questions that a white contractor would have, you are 'difficult to work with' ... those types of things are detrimental to a minority-owned business." [#1]

This African American business also owner reported unfavorable work environments for minorities and women. "Getting your truck sprayed, different things like tearing checks open [to] see what you make, or you are blocked off a job because you are the only woman or African American out there." [#1]

- The leader of a minority trade association reported unfavorable treatment among minority laborers. "Yes, this [discrimination] is true for heavy labor and climate. Minorities are considered better to work in the heat without water." [#69]
- A representative of a minority trade association who specializes in assisting Native
 Americans indicated there are, particularly in the public sector, certain projects that have
 created unfavorable work environments for minority and women-owned small
 businesses. [#53]
- A Native American owner of a DBE engineering firm reported distrust with regard to his certification. "It's nothing you can prove. I don't particular[ly] look like an 'Indian.' Being Native American, I have had different feedback. Because of stereotypical associations to Native Americans, well, 'what's an Indian'? There seems to be one inference maybe that was one category within the DBE program that had some abuses in it." He added, "When you go in and set up as a DBE it is an easy target for criticism." [#6]
- The minority owner of a DBE-certified professional services firm reported being disadvantaged by the perception that "bigger is better." He indicated that this puts DBEs at a disadvantage. [#17]

An email participant wrote, "But I think the biggest issue is that staffs of public agencies intentionally recommend that projects be segregated in such a way as to claim DBE/WBE/VBE state and federal requirements don't apply. I have spoken to staff and they said that although state and federal monies were comingled on projects, they did not require participation, I wrote to state congressmen and one project was delayed, however I did not make any friends. This is the quandary, if you speak up, it draws negative attention and you get blacklisted." [WT#1]

There were also many examples of comments related to gender discrimination.

- The minority owner of an engineering-related firm noted that minority-owned businesses are under greater scrutiny than are non-minority-owned firms. "When it comes to dealing with people who are hesitant, until you prove yourself, you have to open up your book, license and personal financial statement. I think there is a lot more scrutiny to a person of color than anybody else." [#5]
- The female owner of a trucking business indicated having experience with stereotypical attitudes regarding woman in the trucking business. She said, "There are times where I really have to bite my tongue." [#22]
- Another owner of a woman-owned trucking firm (DBE-certified) indicated that in a male-dominated industry, she questions if men take her seriously. [#23]
- The female owner of a WBE-certified professional services firm reported that she has experienced unspoken discrimination. She said, "You know what, there isn't really anything that you can point to. There's nothing overt." [#33]
 - She added that she often gets questions in the building community about whether or not she is going to do the work herself. She reported that in a male-dominated field, some find it difficult to believe she can get her hands dirty and do her line of work. This occurs in both the public and the private sectors. [#33]
- The owner of a WBE-certified specialty contractor reported that large firms often assume that DBE firms are not as competent because they are small. [#38]
- The female owner of a DBE-certified specialty contracting company said, "If I go to a meeting, like a pre-bid meeting, I will quite often be the only woman there. And I'll get a lot of looks like, 'What are you doing here?' And it's just looks that may be what I'm perceiving no one says anything, usually but if I'm asked, they'll usually ask again—'You own the company? You're the majority partner?' It's that kind of comment that makes me realize over and over again that people are quite surprised that it's a woman-owned company." [#39]
- A female owner of a DBE-certified trucking business indicated she faces challenges as a
 woman in the industry, she said, "Just being a woman and dealing with some of the
 contractors, trying to get your foot in the door." [#64]

- The leader of a minority trade association acknowledged also hearing derogatory comments about women. "Tve heard she is a woman, she can't do the job!" [#69]
- After 20 years in business, the representative of a white woman-owned specialty contracting firm reported barriers in comparison with male-owned firms stating,
 ... after 20 years you'd think it wouldn't be so." [AI#60]
- The woman owner of a trucking and hauling firm stated, "My husband and I are operators, and they don't recognize me as an operator and they don't recognize me as an owner." [AI#109]

Some interviewees reported that race or gender discrimination did not affect them or the industry.

- When asked at a public hearing about whether there was a level playing field for minority- and women-owned firms in the transportation contracting industry, a Hispanic American female construction business owner (PM#1) said, "Me? Honestly, I don't even think about the color of my skin. I'm sorry, to me it's my work ethic that's gonna get me the job. If I do show up and I do a good job, I'm counting on that. I'm not counting on what I look like." She said that she rather not do "the whole women-owned and minority thing ... I want to be judged ... [by] my performance." [PM#1]
- A young man representing a large majority-owned firm said, "My generation is intolerant of discrimination, I see it disappearing, at least I hope." [#41]
- A representative of a majority construction industry organization commented regarding the need for gender-conscious programs or DBE contract goals, that in the contracting community, racism does not exists. "There is a need for quality and qualified subcontractors regardless of gender and race." [#47]

Any "Good ol' boy" network or other closed networks. Many interviewees had comments concerning the existence of a "good ol' boy" network that affects business opportunities.

Those who reported the existence of a good ol' boy network included minority, female, and white male interviewees. A number of interviewees thought that the "good ol' boy" network negatively affected women- and minority-owned firms. [e.g., #49, #53] For example:

- A minority subcontractor stated, "If you are not part of the network, you don't get work." When asked to expand on any allegations of unfair treatment, he added, "Sometimes [ADOT] make[s] exceptions for certain people but not others." [#5]
- An African American business owner reported differences in the way white and African American contractors are treated by building inspectors. He stated that inspectors seek the good ol' boy network. "It is what inspectors seek. It is difficult to work with. When you [an African American business owner] have the same questions that a white contractor would have, you are 'difficult to work with' ... those types of things are detrimental to a minority-owned business." [#1]

- The owner of a DBE-certified engineering-related firm indicated that reputation, size, and qualifications often play a role in getting work. He added that good ol' boy factors sometimes play a role as well. [#17]
- The female owner of a trucking business reported existence of a good ol' boy network in the trucking industry. She reported a willingness to fight with the "boys" to get work in the industry. [#22]
- Regarding good ol' boy network, the female owner of a DBE-certified specialty contracting firm said that she "feels it," but second guesses those feelings, at times. [#39]
- A female representative of a professional engineering organization remarked she had a conversation with a woman who owned a large firm, and the woman talked about how there is a golfing team within ADOT, but it is all men. She said that she and the woman joked about creating an all-women's golfing team. [#42]
- The female owner of a DBE-certified engineering firm stated, "I think the whole women-owned and minority thing is a challenge for Arizona. Our ethnic diversity is not right. There has always been a "good ol' boy" network. I have been able to interact and make relationships with people, but I just don't get work there." [#43]
 - The same female owner added that she has tried to hire people who have been in the ["good ol' boy"] network that can filter through the group [network] and find work for the business. [#43]
- Although "not quite as prevalent as it used to be," the Hispanic male owner of a specialty contracting firm reported, "The good ol' boy network is alive and strong."
 [#44]
- A Hispanic DBE general contractor said, "Oh God, yes!" when asked if the "good ol' boy" network still exists. [#50]
- A Hispanic member of a trade organization stated that the "good ol' boy" networks still exist, and unless decision-makers are cognizant of that and make a concerted and sustained push for inclusion of marginalized groups, they will continue indefinitely.[#51]
- Primes have refused to work with the firm because they're a DBE and are not part of their "good ol' boy network" stated a male aggregate business owner. [#65]
- In some areas it is hard for an Asian American business owner, "to move up to a preferred vendor on the list since many time people prefer to rehire past subconsultants."[#62]
- The female representative of an industry association indicated, "Arizona is famous for that [good ol' boy network]." [#68]

- The leader of a minority trade association said, "There are some primes, who for lack of a better word, are in the "good ol boy" network that would not provide opportunities for women or minorities It's hard to break in; there are firms that only hire Anglos." [#69]
- The female owner of a DBE- and SBE-certified engineering firm reported, once awarded a subcontract, losing it to the prime contractor's "drinking buddy." This "bit" her financially for years to come causing a \$150,000 loss in expected revenue. She said, "I was slapped ... maybe I should have played the game." [#70]

Some interviewees acknowledged the "good ol' boy" network, but suggested that its influence is not as strong today as in the past. For example:

- A representative of a large majority-owned construction firm said, "In my opinion its dwindling ... with my generation, I'm 31, I cannot see it [good ol' boy network] working.[#41]
- The vice president of a minority specialty-contracting firm reported that the good ol' boy network was common in the past but indicated that the industry had changed. "I think that there are so many companies buying companies. Some of the major companies that we have, there is no place for it [the good ol' boy network] anymore." [#3]

Some interviewees reported being part of good ol' boy network. For example, the male president and female senior vice president of a construction organization both reported firms involved in the network. In defense, they suggested that firms in the "network" started out small and worked hard to get where they are. [#46, #47]

Some reported not being aware of a "good ol' boy" network per se, but rather acknowledged subjectivity in selection of contractors and subcontractors. For example, the Asian-Pacific American president of a DBE-certified professional services firm stated, "Our business is based on qualification. By that nature there is some subjectivity in selection — maybe one firm is better than the other." [#25]

G. Insights Regarding Business Assistance Programs, Changes in Contracting Processes or Any Other Neutral Measures

The study team asked business owners and managers about their views of potential race- and genderneutral measures that might help all small businesses, or all businesses, obtain work in the transportation contracting industry. Interviewees discussed various types of potential measures and, in many cases, made recommendations for specific programs and program topics. The following pages of this Appendix review comments pertaining to:

- Technical assistance and support services (page 71);
- Mentor-protégé relationships (page 73);
- Joint venture relationships (page 74);
- Bonding assistance (page 74);
- Assistance in obtaining business insurance (page 75);
- Assistance in using emerging technology (page 75);
- Information on public agency contracting procedures and bidding opportunities (page 75);
- On-line registration with a public agency as a potential bidder (page 76);
- Hard copy or electronic directory of potential subcontractors (page 76);
- Pre-bid conferences where subcontractors can meet prime contractors (page 76);
- Distribution of lists of planholders or other lists of possible prime bidders to potential subcontractors (page 76);
- Other agency outreach such as vendor fairs and events (page 77);
- Breaking up large contracts into smaller pieces (page 77);
- Small business set-asides (page 79);
- Mandatory subcontracting minimums (page 79);
- Small business subcontracting goals (page 80); and
- Formal complaint and grievance procedures (page 80).

Technical assistance and support services. The study team discussed different types of technical assistance and other business support programs.

The majority of business owners, whether aware or not aware of technical assistance and support services, reported that most services named in the bullet list above would be helpful. [e.g., #1, #15, #19, #21, #25, #29,#30,#32, #33, #38, #40, #52] Examples include:

- The leader of a DBE-certified Native American-owned engineering firm reported advantages to many supportive services including assistance with financing, bonding, emerging technologies (particularly new software training), on-line registration and others. They also reported attending pre-bids and vendor fairs, when possible. However, for engineers, mentor-protégé relationships were reportedly more relevant than on-the-job training opportunities. [#10, #11]
- Industry-specific technical support services and on-the-job training are very important according to a Hispanic member of a trade organization. Technical support helps build a stronger supply chain over the long term. "Industry specific support and training can help DBE's help build a stronger supply chain." [#51]

Some business owners and managers reported being aware of technical assistance and support services programs and having used them, but may or may not have had successful experiences. Examples of such comments include the following:

- The representative of a WBE-, SBA- and SBE-certified specialty-contracting firm reported success. "The systems I had in the past year. That was how I got my WOSBE [Women Owned Small Business Enterprise certification through the Small Business Administration]. I got 80 percent through the paperwork, went downtown and met with them, figured out how to fill the rest of the blanks. My application was the first one approved for the program. I submitted four months after I started and I was still the first one to make it through. The fact that I went downtown and spent two hours on it made a huge difference." [#14]
- The representative of a DBE-certified engineering firm successfully participated in training sessions. "We would use that [technical and supportive services]. The National Highway Institute (sometimes through ADOT) puts on training sessions and we've used them … it's for all the consultants. That is a very good program." [#16]
- The same principal participated in the City of Phoenix Management Technical Assistance Program (MTA) with greater success. "The thing with the City of Phoenix program is that within two years, they want you to hire someone if you use the program. We hired a young lady and she helped us with our QuickBooks." [#4]

Some business owners who found several technical and support services helpful reported frustration with some other technical assistance services offered, saying that although some appear on the surface to be helpful, as currently implemented they are not. For example:

- A minority-owned design engineering business principal told of an unsuccessful attempt to secure technical services for website development through ADOT. He said that although the service was advertised, it never materialized for him. "At the time they didn't have the funding to support the consultants." [#4]
- A majority specialty-contracting firm owner favored assistance with start-up, financing, joint ventures, contracting and bidding, and other operational assistance. However, he reported that mandatory subcontracting minimums would be too limiting, and added, "I don't think the public agency should set a goal for using subcontractors. You could help small businesses to be established, but I don't think the public agency should control all of that." [#15]

Some had positive experiences to report about ADOT supportive services. For example, the partner in an Asian-Pacific American-owned DBE specialty contracting firm reported being informed as a result of attending many ADOT classes. [#25]

Mentor-protégé relationships. Many interviewees commented on mentor-protégé programs. A number of business owners said that they had informal mentor relationships.

- A Hispanic woman representative of a minority-owned materials supply business remarked that she would have appreciated a mentor for certain business operations such as managing prevailing wage issues. [#29]
- The representative of a DBE-certified engineering firm experienced informal mentor-protégé relationships, "... firms that take us under their wings that we've worked with over the years." [#16]
- A representative of a large majority-owned construction firm said their firm has a large internship program. He added, "People are proud to be part of our team." [#37]
- The partner in an Asian-Pacific American-owned DBE specialty contracting firm indicated that the firm could have benefitted from a mentor-protégé relationship with a general contractor. "I don't think I would be going out of business if there were a 'GC' [general contractor] out there that would mentor me. I think I would be one of the successful companies, but I have a lack of help." [#25]
- The owner of a WBE-certified specialty contracting business said, "I'd love a big general contractor to be my mentor, that'd be great." [#38]
- The representative of a white woman-owned commercial building company performing mostly federal jobs recommended, "Find a good mentor." [AI#307]

- An Hispanic male member of a trade organization commented that mentor-protégé relationships were key and very beneficial to the supply chain overall by identifying "upand-coming" minority-owned businesses and matching them with successful companies that can help teach skills and best practices.[#51]
- The Hispanic male owner of a non-certified firm providing specialty services said that he has considered participating in a mentor-protégé relationship, but the opportunity never presented itself. [#30]
- An owner of a DBE- and SBE-certified engineering firm indicated interest in mentor-protégé relationships. [#70]

Joint venture relationships. Interviewees also discussed joint venture relationships.

- The owner of a woman-owned trucking business reported that joint venture relationships provide future-oriented stability and a safety net for businesses. [#22]
- The Hispanic male owner of a non-certified firm providing specialty services said that he has never been a part of a joint venture, but he would be interested in doing it. [#30]
- The owner of a WBE-certified specialty contractor stated that joint venture relationships are helpful and she participated in such a relationship. [#38]

Bonding assistance. The study team asked business owners and managers about bonding assistance.

- For the Hispanic American representative of a minority-owned commercial construction firm indicated a need for "assistance" with securing bonding. "Bonding is the only issue we have had. We are positioning ourselves to do government work. Any assistance we can get would be advantageous." [AI#338]
- The owner of a WBE-certified specialty contractor suggested for ADOT to advance small businesses, they need to have a program that would help small businesses obtain bonding. "Base it on their commercial insurance, for example. If it is good, why not offer them bonding? If they have good credit, or even average credit, if they have capital, help them out!" [#38]
- The Hispanic American representative of a general contracting and engineering firm reported needing assistance obtaining performance bonds. "The performance bonds are very difficult to obtain. This is the reason I do not have a lot of work right now." [AI#343]
- The owner of a WBE-certified specialty contracting business stated that, to advance, small businesses require bonding assistance and suggested that ADOT establish a bonding program to assist small businesses. [#38]

Assistance in obtaining business insurance. Some business owners and managers interviewed said that assistance obtaining business insurance was a need. [e.g., #15, #38] For example:

- The minority co-owner of a general contracting and procurement firm said, "Help in obtaining business insurance would be fantastic." [#15]
- For the representative of a woman-owned general contracting firm, "insurance requirements are the biggest obstacles." [AI#321]

Assistance in using emerging technology. Some business owners said that assistance using emerging technology would be helpful. [For example, the female owner of a WBE-certified professional services firm reported that although she's fairly tech savvy, there are still things she has trouble with. She would like the assistance. [#33]

Information on public agency contracting procedures and bidding opportunities. Most interviewees indicated that more information on public agency contracting procedures and bidding opportunities would be helpful. [#33, #38, #40] For example:

- For the representative of a woman-owned general contracting firm, finding information is a challenge. "It would be nice to have a centralized place where people could come together and find work. To get government contracts is very difficult to understand. You almost have to pay someone to walk you through it and is another cost." [AI#321]
- The representative of a majority-owned specialty contracting firm reported wanting direct notification of bidding opportunities from ADOT "to make it easier to bid." [AI#5]
- For a white woman-owned construction business, education on bidding procedures for public agencies would be helpful. "I just need to be better educated, I don't have time as an owner to spend days on a bid I need to have. A one-on-one briefing on how to go about it ... to make bidding a little more convenient." [AI#62]
- The representative of a minority-owned specialty contracting company wanted increased dissemination of information on bidding. "It's tough getting bids and I have difficulties know what's going on. I need more information." [AI#271]
- The representative of a white woman-owned vendor wanted access to assistance "to find out how to bid on ADOT and state government contracts." [AI#196]

Some business owners and managers reported that they were already receiving information on bidding opportunities or knew how to search for them. For example, the representative of a majority-owned professional services firm reported that that ADOT makes a solid effort on providing information. [#34]

On-line registration with a public agency as a potential bidder. Most owners and managers of construction companies said that online registration with public agencies would be helpful.

- A number of interviewees said their companies were already participating in on-line bidder registration systems.
- However, a minority-owned engineering firm principal reported that online registration was more relevant for prime contractors than for subcontractors. "The online registration with a public agency as a potential bidder is normally a benefit to prime consultants, not as much as subconsultants." [#4]

Hard copy or electronic directory of potential subcontractors. Most interviewees said that hard copy or electronic lists of potential subcontractors would be helpful.

Pre-bid conferences where subs can meet primes. Many business owners and managers supported holding pre-bid conferences. [for example, #11, #16, #18, #33, #38, #40]

A few interviewees did not think that pre-bid meetings were useful.

- For example, the representative of a majority-owned professional services firm reported that most of the small businesses know who the primes are and had already formed good relationships with primes. He said, "Maybe some small businesses would want to meet more primes but in our case it would not be helpful." [#34]
- The owner of an MBE, SBE and DBE specialty contracting firm called pre-bid conferences, where subcontractors can meet prime contractors, "a joke." He said, "It is a joke because they [primes] don't send people with any inquiries. The prime would send someone with no authority or certificate." [#1]

Distribution of lists of planholders or other lists of possible prime bidders to potential subcontractors. Most of the business owners and managers interviewed supported the distribution of planholders lists. Examples of comments in support of distribution of planholders lists include:

- The Hispanic male owner of a non-certified firm providing electrical services said that it would be helpful if a list of plan holders or other lists of possible prime bidders was distributed to potential subcontractors. [#30]
- The owner of a WBE-certified specialty contractor stated that distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors would be helpful. She added that it is good to know who has the plans. [#38]

Other agency outreach such as vendor fairs and events. Some business owners and managers reported that outreach such as vendor fairs and events were useful. Others no longer regularly attend those events.

Examples of positive comments about agency outreach events include the following:

- A Hispanic male owner of a DBE-certified materials supply firm indicated that he is aware of vendor fairs and events but he has never attended them. [#32]
- The Hispanic male owner of a non-certified firm providing electrical services said that if he knew about agency outreach such as vendor fairs and events he would absolutely attend them. [#30]
- When asked about the benefits of agency outreach programs like meetings and workshops, the Hispanic female owner of a non-certified materials supply company said, "I think that it's important that you meet other people in the industry that you're in, so I think they're a great idea." [#40]

A number of business owners and managers indicated that outreach events were not useful.

For example, the female owner of a WBE-certified professional services firm said, "I attend a lot of those. Some of them are really good and some of them are a waste of time. The last one they had at Starr Pass was so expensive I couldn't afford to do it. And then there were workshops, and yes I would've liked to have gone to the workshops, but at this point in time, I need to go to workshops like I need a hole in the head. I need to get some work. But when you figure that the cost was going to be over \$2,000 at Starr Pass..." [#33]

Breaking up large contracts into smaller pieces. The size of contracts and unbundling of contracts were topics of interest to many interviewees.

Most business owners and managers interviewed indicated that breaking up large contracts into smaller components would be helpful. [e.g., #10, #11, #33, #34, #36] Examples of comments include:

■ The Hispanic American owner of a DBE-certified engineering firm reported that breaking up large contracts into smaller pieces (unbundling) would help him. "It'd be nice to be part of a team to design a specific portion of design work for a highway project. But, like I said, most [prime] engineering firms already have that talent in-house, and they don't really need someone like myself on the design side, not the consulting, not the construction side" He added, "So maybe that's where the issue is. ADOT doesn't have a specific requirement for prime contractors or big consulting firms to hire a sub consultant like myself for very specific design work." [#13]

The same engineer demonstrated how unbundling could improve opportunities for small businesses. "For civil engineering the design work can be broken up into very, very neat packages; and, in fact, internal to these large engineering companies they have their departments do pavement design, do drainage, do brick design, do river system analysis. Those sorts of things are very, very 'package-able.' You can take these aspects of the design process and package them into scopes of work for a department of a company or a firm like myself." [#13]

- One of the greatest barriers to small businesses is the way contracts are packaged, according to a representative of a Hispanic trade organization. This individual reported that contracts from public agencies are often bundled so only the largest companies have the capability to handle them.[#51]
- The representative of an SBE-certified majority-owned construction firm reported that although the firm performs some larger projects, unbundling would increase the firm's ability to qualify for public sector work (overcoming limitations resulting from not having DBE-certification). [#20]
- The Hispanic male owner of a non-certified firm providing specialty services said that he would like to see contracts broken up, because most prime contractors already have their own electricians, and it is common for contractors to use their own people when there is an opportunity to subcontract. [#30]
- The owner of a WBE-certified specialty contractor stated that breaking up large contracts into smaller pieces (unbundling) would be helpful. She commented that breaking it up and gives everyone a chance at the work. [#38]
- For minority- and women-owned businesses, project size can be a barrier to taking on the role of a prime contractor. As a small engineering firm, "a project can be really big ... in designing something we just may not have the manpower on that level ... we could ... design one substation ... the work that we would currently do for ADOT we would work as a sub." A women-owned design firm also reported that she is always a subcontractor on ADOT projects as those assignments are typically bundled. [TLS]
- For a white woman-owned engineering design firm, bundling limits business opportunities for her. "The bundling of projects into large, supersized projects prevents small firms from priming and often the primes do not want to subcontract unless there is a DBE goal." [AI#143]

A few business owners saw both positive and negative aspects of unbundling contracts. For example, a Hispanic DBE-certified business owner finds negativity in unbundling. He said, "Primes hire subcontractors without unbundling requirements. Breaking up the contracts won't work. You are trying to cut your own throat and underbid the other bidders. We need people who make money. I do not mind giving the primes 30-40 percent. If they are making money, I have a job. If you break the contracts, no one is making money." [#32]

Small business set-asides. The study team discussed the concept of small business set-asides with business owners and managers. That type of program would limit bidding for certain contracts to firms qualifying as small businesses.

Most business owners and managers supported small business set-asides. Examples of those comments include the following:

- The owner of an MBE, SBE and DBE specialty contracting firm who reported small business set-asides as a "a blessing." [#1]
- The Hispanic male owner of a non-certified firm providing electrical services said that small business set-asides would be a good idea. [#30]
- The representative of a majority-owned professional services firm reported that small business set-asides would be helpful. [#34]
- The owner of a WBE-certified specialty contractor stated that small business set-asides are helpful, because primes will not use small businesses unless they are forced to. [#38]
- This representative of a Hispanic trade organization commented small business setasides would be helpful, and said they are "sorely missed in the Arizona market." He continued, saying that the lack of set-asides puts Arizona at a disadvantage compared to markets that have aggressive integration programs. [#51]
- The owner of a DBE-certified engineering-related firm reported that his small firm is at a disadvantage when competing for ADOT contracts designed for larger firms. [#17]

Mandatory subcontracting minimums. Some business owners and managers supported requiring a minimum level of subcontracting on projects. Some interviewees did not.

Examples of comments in support of a mandatory subcontracting minimum program include the following:

- The Hispanic male owner of a non-certified firm providing electrical services said that small businesses should always be utilized. [#30]
- A representative of a majority specialty contracting firm reported that ADOT should increase the DBE goal and challenge contractors to meet those goals by looking at the procurement processes. For example he added, "It seems like the alternative delivery, the goal is not as high as a hard-bid projects and job order contracts, there are no goals established." [#48]
- A representative of an engineering association said, "I'm not opposed to that as long as the minimums aren't so high." He added that, in Arizona, "the prime is responsible for 51 percent of the work. If we weren't bound by that there would be more opportunities to hire more subs to do the work." Also commented based on one observation, ADOT DBE requirements were 5 or 6 percent for contractors and soon after that the engineering firms' goals doubled so ADOT was meeting their goals. [#57]

Some interviewees did not like the idea of mandatory subcontracting minimums or did not think it would be effective. For example:

- A male business owner of a small majority-owned engineering firm reported that primes have problems with the word "mandatory." He indicated that primes want to use inhouse staff not subcontractors. [#72]
- Regarding subcontracting minimums, a majority-owned business representative said,
 "it sounds restricting." [#26]
- The owner of a WBE-certified specialty contractor stated that the idea is scary because a general contractor might want to break the work up more than the minimum. [#38]
- A majority specialty-contracting firm owner favored assistance with start-up, financing, joint ventures, contracting and bidding, and other operational assistance. However, he reported that mandatory subcontracting minimums would be too limiting, and added, "I don't think the public agency should set a goal for using subcontractors. You could help small businesses to be established, but I don't think the public agency should control all of that." [#15]

Small business subcontracting goals. Interviewees discussed the concept of setting contract goals for small business participation.

Many business owners and managers indicated that small business subcontracting goals would be helpful. [e.g., #30, #33, #38] For example:

■ The representative of a majority-owned professional services firm reported that small business subcontracting goals would be helpful rather than just having a DBE goal. [#34]

Formal complaint/grievance procedures. The study team discussed procedures for making complaints or outlining grievances. There were a number of wide-ranging comments.

- For example, the representative of a majority-owned construction firm spoke favorably about ADOT's grievance procedure. "The greatest thing with ADOT's grievance procedure is that they have an escalation chain [Escalation Ladder] Every time I worked with ADOT, they want to help you succeed; they do not want to bankrupt anyone. We would never have to go to mediation or anything like that." [#20]
- A female business owner of an aggregate firm commented, "We had a bad experience with a company ... that was very poorly managed. We had an ADOT contract and they were buying the [materials] from us but didn't want to listen to anyone and lost the whole project, they walked out on us and we didn't get paid." She remarked they inquired about the grievance process through their attorneys but didn't go through the ADOT grievance procedure." [#65]

■ The representative of a majority-owned professional services firm stated that formal complaint and grievance procedures would not be helpful unless the complaints are reviewed by an independent entity, rather than the ADOT auditors, that would state whether or not the appeal meets the Federal Accounting Regulations or not. [#34]

H. Insights Regarding DBE Program or any other Race-/Ethnicity- or Gender-based Measures

Interviewees, participants in public hearings, and other individuals made a number of comments about race- and gender-based measures that public agencies use, including DBE contract goals, including comments regarding:

- ADOT or other public agency DBE subcontracting goals programs (page 81);
- Any other ADOT or other public agency programs (page 85);
- Any issues regarding ADOT monitoring and enforcement of its programs, including any false DBE reporting or abuse of "good faith efforts" processes (page 85);
- Any effects from discontinuing DBE contract goals in 2006 or reinstating goals program in recent years (page 88);
- MBE/WBE/DBE fronts or fraud (page 89);
- False reporting of DBE participation of falsifying good faith efforts (page 90); and
- Effects of DBE contract goals on other businesses (page 91).

ADOT or other DBE subcontracting goals programs. There were comments in favor of the Federal DBE Program, including DBE contract goals.]

Many reported benefitting from DBE contract goals, or expecting to benefit. A number of businesses described their experiences:

- The Asian-Pacific American president of a DBE-certified professional services firm reported, "For example, other cities don't have a DBE requirement. We find it more difficult to get work in those situations because the type of work we do, most of the primes have those services." [#21]
- The representative of a woman-owned engineering-related firm reported, "Qualifying as a DBE ... will help expand my horizon with ADOT." [AI#59]

All three subcontracting firms participating in the Tucson listening session reported that ADOT's DBE Program presented expanded opportunities for work for their firm. For example, a women-owned design firm reported a lot more opportunity because of the DBE Program. As proof after her firm recently merged with another company, she reported that primes consistently inquired if the merger had affected the firm's DBE status. From this she concluded, "So for what it's worth [the DBE Program] has actually created better opportunities for us ... [we get repeat work requests] they [primes] typically are trying to meet the goal and ask us to be on their team and we do the work." [TLS]

The minority- and women-owned engineering firm owner agreed. "DBE creates opportunities for us. We work for companies that we have worked for before just because of the DBE. However she added, then if you perform to expectations they have other jobs [not having DBE goals]." [TLS]

A minority-owned firm added, "I would agree with that, also that at the beginning there was more [DBE] opportunity but now a days most of my customers care less about the DBE based on [our] quality work." [TLS]

A prime consultant agreed that hiring a DBE as a subcontractor can result in a long-term relationship. "If they do really good work ... let's put them on even if there is no DBE requirement. We'll bring them on regardless just because they do good work." [TLS]

- A level playing field for one minority- and women-owned business meant knowing about the program, and using it to get a foot in the door. "The DBE Program gives you an opportunity to get through the door ... It's difficult to do something if you don't know how to start ... the Program is important because it provides the [first] opportunity for a small business or minority business ... but you have to know about the Program ... not all businesses may know about the Program." [TLS]
- Another women-owned firm added, "It allows for a more diverse workforce, it's allowed
 a more white-male dominated field to be more diverse ... helps get a foot in the door."
 [TLS]
- A minority-owned business owner believes that over the course of time, there is a more level field for his DBE business. He suggested that after his first jobs work quality has become the key to his success. However he suggested that for others there could be a perceived disadvantage to DBE-certification. He offered, "Some people don't want the government looking at your books and I can totally understand that." [TLS]
- The CEO of a majority-owned SBE engineering firm remarked, "If ADOT has a goal, it's part of doing the work and playing by the rules. If that is what ADOT needs to do to get federal funding, we will support the program." [#71

Some interviewees had negative experiences and said that race- and gender-based programs should be better monitored, substantially changed or discontinued. For example:

- Representatives of a majority construction industry organization commented regarding the need for gender-conscious programs or DBE contract goals, that in the contracting community, racism does not exist. "There is a need for quality and qualified subcontractors regardless of gender and race." [#46, #47]
- The representative of a majority-owned professional services firm said, "I appreciate all the effort that is helping DBE businesses, but it always throws me the wrong way when the project is called 'race' conscious. To me, it just sounds like a 'racist' conscious. To me, I do not see any disparity with respect to DBE because the industry is fiercely competitive; you really do not care where they come from. All you want is someone to help you win a job." He added that there should be great small business goals, not just DBE goals. [#34]
- One prime contractor suggested that many minority firms are surviving without being DBE-certified with some becoming certified and entering fields where they are not qualified. [TLS]
- One Tucson listening session participant from a large majority-owned contracting firm spoke about the period during which ADOT had no DBE goals. He questioned if and how that period differed from periods when goals were mandated, and if similarities and differences were tracked. He stated, "Market forces tend to drive how contracting happens. There are various instances where goals get set inordinately high and you are forced to go out to invent participation opportunities. But by and large, it seems like market forces kind of drive it in a great way.... Was that tracked?" [TLS]
- Another prime contractor at the Tucson listening session reported difficulty locating minority- and women-owned subs when goals were required. He suggested that in the past 15 years minority- and women-owned subs had become scarcer due to firm buyouts, closures and other consequences of the Great Recession.
 - To meet DBE contracting goals, he reported to typically include DBE-certified trucking firms or the only minority-owned guardrail firm in Tucson (when those services were required). He concluded that DBE contracting goals unfairly impacted small businesses by restricting competition among them. "All you're going to do is overlay and overlay a job: they put a goal on it, it becomes almost impossible to [comply] unless they invent something like putting guardrail improvements on the same job. Then what they do is limit the competition when you have to have a minority goal and there are four guardrail subs out there [with only one being minority-owned] they tell the three others don't even bother, falsely generating work by setting goals putting other small businesses out of business." [TLS]
- Another majority contractor at the Tucson listening session added, "Don't forget getting your minority barricade contractor to ... put his stickers on your equipment ... people do that kind of stuff just to meet goals."

The same contractor explained that in some instances, contractors seek out DBE-certified businesses in other fields to set them up to perform work outside their typical scope of services. "It's probably a hardship. It takes people out of what we might call a normal realm of operating. It's definitely not something where a person is interested in doing contracting work [and] has this DBE opportunity because goals were set properly. I call it somewhat 'contrived' to meet a goal, an unnatural goal on a project." [TLS]

- Another majority contractor in the Tucson listening session clarified that in his experience encouraging subcontractors to work outside their specialty area is not common, and has never been a practice at his firm. "[Firm name] has never had to do that. It makes it sound as if that is a prevalent practice ... we've never done it." Yet later in the discussion, it was suggested that working outside the typical scope could be an advantage for a small business. [TLS]
- According to contractors in the Tucson listening session, overall, DBE contracting goals were typically met through trucking, traffic control, guardrail and [sometimes] milling. One majority contractor added that meeting those goals was more difficult in rural areas where access to subcontractors was limited. "When jobs are in the middle of nowhere, it's hard to get those traffic controls guys to go there, they want to work in town."
- A large majority contractor suggested that ADOT goals were, for the most part, attainable. However, local jurisdictions could be more difficult to meet. "The ADOT goals in general, there might be specific instances where there are exceptions, but in general the [ADOT] goals are reasonable and attainable. [However] we found in some of the local jurisdiction work City of Tucson, Pima County where they have 20 percent requirements that those aren't realistic or really achievable." [TLS]
- Another majority contractor suggested that local jurisdictions set goals that often result in the same minority contractors getting repeat work forcing larger firms to lay off workers having higher wages and benefits packages. "And again, [in] more of the local jurisdictions what happens is that if there are several areas that historically, by goal setting, get the same work to the same people over and over again say like curb and gutter, sidewalk, maybe piping. What happens is all these smaller contractors, whether they're small business or minorities, most of them don't carry any kind of benefits packages for their people we lay people off at higher wages with benefits so that you can generate a job for a minority ... All you're doing is promoting ... the small businessman or minority business person [not offering employee benefits] making the level of the workforce go down.
- However, a small minority-owned firm in the Tucson listening session argued that the described "no-benefits, minority-owned" business model did not hold true for all minority-owned firms. For example, his firm provided benefits (health, dental, vision and 401K) similar to larger contracting firms. "We offer benefits and will continue to offer them."

Any other ADOT or public agency programs. Interviewees had comments regarding other public agency programs they had experienced. For example:

The representative of a WBE-, SBA and SBE-certified specialty-contracting firm stated, "The City of Tucson kind of washed all the women-owned businesses in with the minority-owned businesses. The minority-owned businesses get priority over the women-owned businesses. There was supposed to be set-asides for WOSB, which is why I chased that through the Feds, but they really haven't done much with that. I've tried to get certified with ADOT, but because the owner doesn't know how to run a backhoe and pour concrete, we don't qualify." [#14]

The same representative added who reported being denied work by ADOT, "I qualify with the City, I qualify with the Fed, why can't I qualify for the State?" [#14]

■ The female owner of a WBE-certified professional services firm said that there's a diversity program for Southwest Gas, which she is registered with. This program, however, has not gone anywhere. She stated that she went to their meetings and went through the registration process, but was told by the program that they just don't have anything right now. This business owner said that she doesn't know if there just isn't any work or if the work is someplace else other than the Tucson area, or if they've gotten comfortable with the same three subcontractors. [#33]

ADOT monitoring and enforcement of its programs. Some interviewees had comments regarding the implementation of the DBE Program, including any false DBE reporting by primes or abuse of "good faith efforts" processes.

Some interviewees were critical about key aspects of the implementation of the Federal DBE Program. For example:

- A Hispanic DBE general contractor commented that so far, the DBE programs have been largely unhelpful for the most part because the people running the programs are not committed to them and do not make the effort necessary to help participating businesses succeed. In his view, the programs funnel money to minority-owned businesses due to DBE goals, but fail to provide firms with the training and support they require to be successful without depending on money designated for DBEs. [#50]
- The female minority owner of a professional services firm reported that some firms do not believe ADOT work is profitable and that there are some certified DBEs that are doing federal work that will not do ADOT work because it is not attractive; it's too competitive. "But that might change if the goals were higher," she said. [#73]

The same female business owner explained that the general perception from primes is that if they propose greater than the goal, and then do not meet what they propose, they will be penalized. [#73]

■ The female representative of a local public agency commented, "As a [representative of a public agency], I am not in support of DBE programs, in general. I suspect that DBE programs rules and requirements are abused — with company heads that are only placeholders to "fill" the DBE requirements, to obtain an additional advantage, without basis. If anything, DBE programs may be aggravating image problems of DBEs in the industry. Plus, to get a more accurate picture of potential disparity of minority- and women-owned businesses, you should also consider the associated census data for the focus population, as well as, for example, the percentage of female engineers registered in the state. The real battle for equality begins in the family, and in the elementary schools." [WT#4]

Some firm owners and managers provided recommendations for the ADOT DBE program or advice for other DBEs. For example:

- The female owner of a trucking business gave examples of why improved communications between ADOT and those seeking DBE certification were needed. "More communications between ADOT and their businesses. An email that says 'do not reply' tends to make me say 'fine, I don't need it then.' And as of now I'm still going through the hoops. And to go back to that technical support, it'd be nice to say 'hey, now what do I do?"" [#22]
- The representative of a DBE-certified engineering firm recommended that ADOT consider ways to streamline bidding through contract negotiations. "I think the speed it takes forever to go through contract negotiations." He suggested that current practices cause confusion. [#16]
- The principal of a minority-owned design engineering firm stated, "I don't have time for ADOT because there is nothing there for me. I have experienced this. You go to these events; you know the scripts, the usual folks the prime consultants sitting there. You just want to get it over with and they tell you, 'You need to come out!' They have a new person in there now; it has been five or six years. The new person they bring in will tell you, 'You need to come in this meeting and you need to be a part of this.' What you don't know is the last person told me the same thing and I did it and nothing came out of it." [#4]
- A female business owner reported wanting ADOT staff available to DBEs. She said, "It is helpful to have a relationship with someone at ADOT. Phoenix has been able to set up a program for small contracts, but ADOT has not been able to do that. You can't prepare to be a prime if you don't know the process." [#43]
- A female representative of a professional engineering organization recommended that ADOT do more small businesses contracts and less in-house work. [#42]

- The Hispanic American owner of a DBE-certified engineering firm recommended that ADOT provide incentives to primes for using DBEs. "Make it more advantageous for large engineering companies to use DBE firms. There's an RFP process, and in the process ADOT can possibly mandate certain portions of contracts to be set-aside for DBE design firms like myself. It would be hiring me as a subconsultant to perform a specific task within the design process." [#13]
- The female owner of a DBE-certified trucking firm reported that extensive documentation presents a barrier to encouraging DBE participation, particularly on the prime contracting side. "For the prime it could be a lot of paperwork, especially when they hire an SBE or DBE. That could be why they do not hire DBEs as sub consultants. Filling out the document is a problem for them and for us, but for us it is worth it and for them it is not." [#23]

She also reported being limited by the firm's newest DBE-certification. "The new one [DBE-certificate] I have been getting — and I have asked ADOT several times — says [the firm offers one service] and that is all. So when these people [primes] look at it, they think all I can do is [that single service] and I do not like that." [#23]

- A minority owner of an engineering-related business reported frustration with DBE classification codes. "One thing I have found difficult is the DBE [program] people and what they classify you under, their codes. If you go to my website, we perform over thirty [job types]. If you go on DBE [directory], I am only certified in three. That doesn't help me open doors They [primes] will contact me, but the services they want me to perform I am not certified with DBE. With DBE, I could only be certified in a few things. The prime would send out a generic email with 2,000 subcontractors and trying to get your foot in the door is difficult." [#5]
- The CEO and operations manager of a DBE-certified engineering firm recommended, "Arizona is a state where you have predominantly Native American communities all across it and a state like that should incorporate something into their programs something like the Department of Defense has an Indian Incentive Program where you get 10 percent credit for promoting that … like they do for the veterans."
- A representative of an Hispanic trade organization remarked that Arizona trails behind other markets as it relates to programs that help promote the success of small minority and women-owned businesses.[#51]
- The Asian-Pacific American president of a DBE-certified professional services firm indicated that the firm's partners strive to graduate from the DBE Program. However, they find graduation difficult to achieve. He recommended that ADOT develop initiatives that help DBE-certified firms compete on the same level as larger companies so that graduation is attainable. [#21]
- The female owner of a DBE-certified engineering firm indicated that the DBE Program was supposed to help businesses flourish and graduate from the program, but it is hard for DBEs to do that when they are struggling to find work.

- A large majority-owned contractor noted that his firm makes every effort to meet a DBE goal. His rationale was that evaluation of the evidence demonstrating food faith efforts is subjective and could be judged unfairly. "Our general attitude is we're going to meet the goal on ADOT work, on local work there is a different attitude. In general, we've found that we can meet the ADOT goals; they're attainable. And, there is some work in administrating good faith efforts, there's always the question. I think our perspective is that even if we go through it and provide the evidence the jurisdiction may not evaluate it fairly." [TLS]
- A representative of a majority-owned contractor spoke of work in another state where his firm had to stretch to meet a 10 percent DBE goal. "We had real clinkers there, who we'd just basically write a check to get off our projects because they were causing more harm than good." He then told about working in a state that did not have DBE goals but required a detailed presentation of good faith efforts. "Which one I like better, it's hard to choose. I'm here [in Tucson] and have to meet goals ... it's hard to find a sub." [TLS]
- Another majority contractor noted that those firms that try to meet the DBE goal through good faith efforts "historically have not been granted it ... so it's mainly saying it exits, but if anybody makes the goal on the project ... they say [anyone trying to demonstrate good faith efforts] should have worked harder at it." [TLS]
- Furthermore, a Hispanic subcontracting firm reported that evaluation of good faith efforts "is subjective, that keeps a lot of people from wanting to be in that position." [TLS]
- The owner of a DBE-certified professional services firm asked, "Is it legal for local governments to co-mingle state and federal funds for local projects then claim it is a local project not requiring DBEs? Also, then segregate out service contracts on state fed funded projects to avoid DBE requirements?" [WT#1]

Effects from discontinuing DBE contract goals in 2006 or reinstating contract goals program in 2010. Owners and managers of interviewed firms about the changes in ADOT operation of the DBE Program in 2006 and reinstated the Program in 2010. A number of businesses described the changes they observed:

- The leader of a DBE engineering firm reported benefitting from the DBE Program when goals were in place and that the business experienced a large disparity when ADOT discontinued DBE contract goals in 2006. [#10]
- The president of an Asian-Pacific-American-owned DBE-certified engineering firm reported that primes stopped using DBEs when no DBE contract goals were in place. [#21]

The principal of a minority-owned design engineering firm stated, "When they discontinued [the DBE goals], the percentage of small/minority-owned firms getting businesses was really low — almost zero. Since they went and instituted the Program, the numbers have gone up. A couple of years ago it went up by 3 percent, which is terribly low." "I know a guy (African American) that is an employee at ADOT in meetings who [would] say, 'Look, it is a federal-funded project. You must have DBE participation,' and people above him would say, 'We do not need to have DBE participation.' The project went out without DBE participation." [#4]

The same principal reported increased usage of DBEs after reinstatement of the DBE Program, "Since they went and instituted the Program, the numbers have gone up." [#4]

- The owner of a WBE-certified specialty contractor stated that she had no work for a long time until the program reinstated in 2010. She said, "It was huge. I could tell right away." [#38]
- The owner of a majority specialty-contracting firm indicated, "With ADOT, they used to make it difficult as a prime contractor to bid a job when they had those mandatory goals. They had a big job and can't find a qualified business." He added that when ADOT removed goals, it made it easier to find qualified subcontractors. [#15]

The same majority contractor clarified, "Actually when they removed those (DBE goals), it made it easier. They say a small business and a disadvantaged business are two different things but in reality they are the same thing. ADOT says, 'Our goal is 7 percent minority- or women-owned' and if you are a minority- or woman-owned business, then you are part of the small company." [#15]

MBE/WBE/DBE fronts or fraud. Interviewees from a diverse range of experiences and opinions commented on fronts or fraud. Some gave first-person accounts of instances they witnessed, whereas others spoke of less-specific instances or those of which they had no first-hand knowledge. For example:

- There is need to effectively "police" the DBE Program to prevent abuse and ensure that only legitimate minority-owned businesses receive DBE certification, according to a Hispanic DBE-certified general contractor. He added while there are many people in DBE Programs that are reliable and do good work, there are also many that abuse the programs or act as fronts. [#50]
- A female representative of a professional engineering organization commented, "For many, many years, a firm had a wife who became the "owner" and it was a minority-owned business. I think that the rules have tightened so there is less of that." [#42]
- The owner of a minority-owned engineering-related firm reported opportunity for abuse. "There are guys that are 'blonde hair, blue eyes' and put 51 percent of their businesses in their wives' name. They say that they are DBE and their wives don't do anything nor do they know what's going on [in] the day-to-day basis." [#5]

The same business owner noted, "I think there are firms that have affiliations, you know, that have multiple firms and would exceed the net worth, as well as the revenue dollars, but they bypass that as well by splitting it into three companies and different owners. I think there are two engineering firms that abuse that quite a bit." He added, "The part that gets to me is that ADOT supports them. You complain about it and they do nothing." [#5]

- The male partner in a woman-owned specialty contracting business reported that he knew of a colleague who named his daughter as the business owner to be a woman-owned business. [#24]
- The representative of a WBE-certified specialty-contracting firm stated, "There are companies in this town that I know for a fact that the woman is basically not involved but it is her husband, but she is on there because she is a woman." [#14]
- A representative of a minority business organization said he is aware of fronts, where WBE- certified businesses were operating under the guise of woman-owned businesses when in reality, their husbands (white males) were actually responsible for managing the businesses. [#67]
- The owner of a majority-owned specialty contracting firm indicated that he has seen a lot of front firms where a man's wife claims to own 51 percent of the firm. He also has seen minority- or woman-owned businesses where they do not have the control of the company. [#15]
- The female owner of a DBE-certified engineering firm reported hearing of firms that "abuse certifications." [#43]
- The representative of a majority-owned 8(a)-certified engineering firm reported that sales of some 8(a)-certified firms (that have worked through the program) from mom and pop to sons and daughters create opportunity for that firm to start the 8(a)-certification process over again. [#18]
- The female owner of a WBE-certified professional services firm said that some of the larger firms that get the work are female-owned, and some masquerade as female-owned. [#33]
- A male business owner of a small majority-owned engineering firm reported, "There has been abuse at ADOT," indicating that there are certified firms that are not disadvantaged. [#72]

False reporting of DBE participation or falsifying good faith efforts. Some public agencies in Arizona (including ADOT) set DBE contract goals on certain projects. Prime contractors can meet the goals through subcontracting commitments or show good faith efforts to do so. The study team asked business owners and managers if they know of any false reporting of DBE participation, or falsification of good faith efforts submissions.

Some business owners reported widespread abuse of the DBE Program through false reporting of DBE participation or falsifying good faith efforts. For example:

- The owner of a majority-owned specialty contracting firm indicated that to comply with the goal, some primes list subs on the bid but perform the work in-house. He added that some may even pay subs for work they did not perform. [#15]
- The owner of a minority-business stated that good faith efforts give prime contractors an opportunity to put themselves first. "I think that exists. I think a lot of the primes show that they are 'trying.' At the end of the day, it may be what is best for their business." [#5]
- The representative of a DBE- and SBE-certified trucking firm acknowledged some abuse of the "good faith efforts" process, noting that sometimes she will receive a bid request from a prime so that the prime can say it looked for bids. [#58]
- The owner of a DBE-certified engineering firm reported, "If the goal is 6 percent, then they want to make sure that your goal is limited to 6 percent. Sometimes you don't get meaningful roles on the projects. The things they don't want to do, they just pass it on to the subs." [#9]

DBE subcontractors reported having been included in a prime's winning bid, but not receiving any work from that prime.

- For example, when there are DBE requirements, the African American-owned DBE specialty- contracting firm described a barrier he called "sub-busting." "Primes and ADOT send you invitations to bid and tell you who is bidding ... then they put on my record that I have been solicited." Furthermore, he explained that subcontractors included in a prime contractor's winning bid may not be given any portion of the work. [#1]
- In the Phoenix public hearing, the female owner of a contracting firm reported that her firm had been used by a prime contractor to meet a DBE contract goal and that she was dropped from the project. She indicated that she notified ADOT but that ADOT did not do anything about it. [PM#17]

Effects of DBE contract goals on other businesses. Some business owners and managers provided insights on the impact of DBE project goals on non-certified firms.

■ For example, the female owner of a WBE-certified professional services firm said, "I've gotten some negative feedback from some of the smaller engineering firms directed at the programs and the fact that I'm in the program and they can't be in the program. They think it's affecting [them]." She added that these businesses believe the program is unfair. [#33]

I. DBE Certification

Business owners and managers discussed the process for DBE certification and other certifications, including comments related to:

- Knowledge of certification opportunities (page 92);
- Ease or difficulty of becoming certified (page 92); and
- Advantages and disadvantages of DBE certification (page 94).

Knowledge of certification opportunities. Some interviewees discussed their level of understanding about how certifications.

 For example, the representative of white woman-owned specialty contracting firm indicated needing more understanding of WBE/SBE certifications and how they are differentiated. [AI#184]

Ease or difficulty of becoming certified. A number of interviewees commented on how easy or difficult it was to become certified.

Many interviewees reported difficulties with the DBE certification process. Several interviewees reported incidents in which state officials seemed too quick to make a judgment that the company applying for certification was a front. Some interviewees indicated that the certification process was time consuming or difficult. Comments included:

- A Hispanic representative of a DBE-certified minority-owned business reported that the certification process takes a lot of time and they always ask for the same thing. [#32]
- The female representative of an industry association described the certification process saying, "It's an extremely difficult process." [#68]
- The representative of a woman-owned professional services consulting firm reported that her "ADOT certification has not been completed in seven months." [AI#57]
- The Asian Pacific American representative of an engineering firm identified "definition of net worth" and its "unreasonable financial limits" as barriers to achieving DBE status. [AI#220]
- A minority-owned engineering firm stated, "It [certification] was not an easy path, it was the lack of knowledge [that] was the main thing. We had to look for assistance and I think that was one of our struggles." [#7]
- The Hispanic American owner of a DBE-certified engineering firm reported the challenge that his name was not recognized as a Hispanic surname, when applying for certification. [#13]

- For the owner of a woman-owned DBE-certified trucking firm, DBE certification required 40 hours of paperwork that spread across two weeks (as the required paperwork had to be fit in between competing work responsibilities). [#23]
- A representative of a white woman-owned specialty service provider indicated not being able to qualify for certification through ADOT. "... we are not qualified as a small business as far as ADOT is concerned and they also have a barrier for personal assets; the qualifications should be reviewed and updated." [AI#190]
- A minority-owned design engineering firm suggested that the time it takes to certify is a barrier for some businesses. "For us [it] is that time is money, nobody is going to take time to mess with that [DBE certification] if there isn't any return on it." [#4]
- The business owner of a minority-owned engineering-related firm reported his frustration regarding obtaining certification. "... it [the DBE certification process] seems like you are guilty first and then you have to prove that you're innocent. You have all this paperwork, financial statements and tax returns. They definitely get into your life. I think that is challenging from a paperwork standpoint I have a general engineering license and [PE] license that says I can do 'A to Z.' But ADOT [for example] only says that you can only do 'A, B and C." [#5]
- The female owner of a trucking business found the DBE certification process to be "long, tedious and difficult." She reported not getting helpful assistance from ADOT throughout the process. Instead, she hired a firm to help walk her through the process that "stalled a little" adding additional challenges. [#22]
 - The same owner later added that she could not see any firm going through the certification process without having outside assistance. [#22]
- The owner of a WBE-certified specialty contractor stated that it was a hassle to be certified because of the paperwork. It took her two years to get the paperwork done. [#38]
- The female owner of a DBE-certified specialty contracting firm reported that it was difficult for her to become certified because she was buying into an existing company, and she had to show that it was "real" and not just "on paper." [#39]
- An owner of a DBE- and SBE-certified engineering firm indicated, "There is lots of paperwork every year." [#70]
- The African American representative of a minority-owned professional services provider reported not to find "a defined space or category in the ADOT system for a certified DBE that provides [their type of service]." This representative added, "We feel that we can be a vital piece in helping prime contractors meet their DBE goals by providing [that service] for their projects." [AI#212]

- At the Phoenix public hearing, the minority female co-owner of a staffing firm (PM#18) asked about ADOT's outreach plans to bring back DBEs into the program. "What incentives are you creating for the primes to go outside of the box in terms of not always using the same folks to do business with? That would attract some of the DBEs that have applied in the past and are no longer interested in being DBEs because they never got any business." [PM#18]
- The principal of a minority-owned design engineering firm recommended streamlining certification paperwork for DBEs. He suggested that ADOT could offer certification renewal every other year rather than requiring annual reviews. [#21]
- The representative of a WBE-, SBA and SBE-certified specialty contracting firm reported that certain constraints got in the way of working for ADOT. ".... After we got our SBE, ADOT was soliciting new contracts. I filled out the paperwork; and, I was 'flat out' told by someone from ADOT that our owner did not come up through the trades and didn't do the physical work so we weren't qualified." [#14]
- A Hispanic female business owner said she had never obtained DBE certification for her firm "just because of the hassle." She claimed that she had attempted to get DBE certification through ADOT last year, but had given up because of the amount of paperwork required. She recommended simplifying the DBE certification process, saying that the current process has "too many loop holes" and is "complex" and "unnecessary." [#55]
- The leader of a local small business association reported that small businesses are wary of pursuing DBE certification because the process requires so much paperwork. [#56]

Some interviewees said that the DBE certification process was reasonable.

■ For example, the representative of a DBE-certified engineering firm valued a somewhat rigorous DBE certification process. He stated, "I think you can't make it [DBE certification] too easy because things need to be verified, so I think that it's very important that that's kept that way." [#16]

Advantages and disadvantages of DBE certification. Interviews included broad discussion of whether and how DBE certification helped subcontractors obtain work from prime contractors.

Many of the owners and managers of DBE-certified firms interviewed indicated that certification helped their business get an initial opportunity to work with a prime contractor. [e.g., #53, #54]

- A Hispanic representative of a DBE-certified firm stated that because of the DBE requirement, his firm was able to get jobs. He stated, "It gave us a chance to do a little work and show others that we can do the work." [#32]
- A Hispanic DBE-certified general contractor felt that there will always be some people who resent DBE programs, and that as long as those people have any power or influence there will be disadvantages to having a DBE certification.[#50]

- The Asian-Pacific American president of a DBE-certified professional services firm reported having more difficulty getting work in cities that do not have a DBE Program. [#21]
- The owner of a WBE-certified specialty contractor reported that the WBE, SBE and DBE programs have helped her get her foot in the door by making connections and getting jobs. [#38]
- A Hispanic- and woman-owned firm in particular commented that certification would open new doors. [#40]
- When asked about the advantages of being certified, the female owner of a DBE-certified specialty contracting firm said, "I think there's an opportunity to bid things because I'm being notified of ADOT of what's coming up and the other huge thing is, on the job that I've already got, I get payment, and I know that I'm going to get payment every month. I have that knowledge that payment is coming in every month. I don't have to worry about being 60 or 90 days out without getting paid." [#39]
- Remarks from a representative of a professional engineering organization were, "The impression that I got from some of our members is that [certification] can be complicated and it takes a lot of paperwork. Once they get it done, they tend to be happy campers because once they were certified through ADOT; the firms are accepted through the City of Phoenix and other cities." She added that one of the minority-firm members in the organization saw that her work increased following certification. [#42]
- A representative of a minority business organization indicated many of his small business members perceived the certification designation as a "hand-me-down." He tries to convince businesses to pursue certification regardless of their pride and concern that others feel they have an unfair advantage. [#67]

Some interviews indicated that there are limited advantages, or even disadvantages, to being DBE-certified, or to having other certifications. For example:

- The African American representative of a minority-owned design engineering firm reported, "It takes time to get our minority qualification and we have not gotten any work. We spent 70 to 80 hours and we have not gotten anything but email about bidding. I have bid many times and have not gotten any answers." [AI#205]
- Since acquiring DBE-certification, the owner of a woman-owned DBE-certified trucking firm reported that certification has not helped the firm secure the larger projects the owner desired. [#23]
- The owner of a minority design-engineering firm suggested that goal setting presents a challenge for DBEs. He reported that in his experience goal setting sets a ceiling; once the goal is met the prime stops seeking additional subcontractors. "We want to use you but we have this environmental firm [for meeting the goal], which is a service that most ADOT jobs are going to require." [#4]

■ The female owner of a WBE-certified professional services firm reported that there is a lot of paperwork to keep the certification. She has considered "dumping" the certification because she did not see any advantages to keeping it. However, one of the representatives from the city told her she should just keep the certification because she will not be able to regain the status easily. She added, "And so every year, I jump the hoops, give them my personal finances, give them the company's finances, [I've] done all of the things that they've wanted done. It's given me the opportunity to at least bid with them — we didn't win anything — but it gave you the opportunity to at least bid." [#33]

When asked if she had seen any disadvantage to certification, she stated, "No, I mean it opens a few more doors. It doesn't mean that you're going to get anything." [#33]

- A minority-owned engineering-related firm reported some disadvantages of DBE certification. "I have had it since 2007 and I don't know how much it has helped me. Use me as a DBE then I have more paperwork to fill out forms and participation things, how much it is subcontracted, and it is more of a headache. Use me as not a DBE and I get more work." [#5]
- The female owner of a DBE-certified engineering firm reported, "We do projects in Arizona, we are a staff of 14; we would compete against firms who have 50 offices across the nation. We always try to point out in our proposals that we are woman-owned and DBE; but I don't know if people read that as a benefit or not. Size is definitely what they look at, so I don't know how we would compete against that." [#43]

Some businesses expressed that there is a negative stigma associated with being a DBE, minority- or women-owned firm or small business. For example:

- A minority-owned design-engineering firm reported, "There is a stigma associated with DBE, WBE, MBE, etc. There is a negative connotation It is as if someone is making the prime consultants have to use the individual." [#4]
- The representative of a DBE-certified engineering firm reported apprehension among primes about doing work with DBEs. [#16]
- The owner of a minority-owned DBE firm reported the stigma of "lower quality work" that surrounds minority-owned firms. [#17]

J. Overall Comments about the Preliminary Proposed Overall DBE Goal for FHWAfunded Contracts and the 2014 Availability Study

Many of the verbal and written comments received during the public comment period for the 2014 Availability Study pertained to the level of the overall DBE goal ADOT has proposed.

Some public input supported a higher goal than the proposed overall DBE goal of 9.38 percent.

Many providing verbal comments at the public hearings and written comments recommended that ADOT set an overall DBE goal for FHWA-funded contracts that was higher than the 9.38 percent proposed preliminary goal.

- The owner of an SBE- and DBE-certified service and supply firm reported, "The DBE goals should be raised into the teens or equivalent to the highest percentage of another state instead of only the 9.38% as proposed. Raising it to the highest possible percentage only give more opportunity to more DBE firms to participate." [WT#7]
- The representative of a minority contracting association commented, "The [Association] recommends that ADOT utilize an overall DBE goal of 18.61 percent with 4.19 percent being race neutral and 14.42 percent as race conscious. This will result in increased business opportunities for DBE firms and will stimulate growth of existing businesses and the State's economy." The representative wrote, "Higher goals create business opportunities for the DBE companies to grow their business and succeed in the ADOT marketplace. A larger DBE goal incentivizes non-certified firms to apply for ADOT certification. While the existing goal has assisted DBEs with opportunities that would not have been there otherwise, the goals are so low that the cost of doing business with ADOT is more than the opportunity offered." "From 2008 through 2010 we learned that a race neutral environment in the state of Arizona produced less than 1 percent of all work procured by the State to DBEs. From 2011 through 2013 we learned that implementing a race conscious goal increased the percentage of ADOT work performed by DBEs. [WT#9]
- The representative of a group of DBE-certified firms wrote, "The ADOT DBE Professional Services Task Force is recommending ADOT take aggressive measures to level the playing field for small, minority, and women-owned businesses and to remove barriers for DBE participation in federally-assisted projects by adopting an overall FHWA DBE goal of 18.61 percent. Moreover, the Task Force recommends a goal comprised of 4.19 percent race-neutral and 14.42 percent race-conscious components."

The written testimony gave a number of points supporting this recommendation including, "Without a strong race conscious element, DBE participation will remain well below the actual levels of DBE availability. The DBE Proposed Goal and Methodology for Federal Fiscal Years 2015-2017 shows that DBE utilization measured by payments reaches just over 4 percent whether or not race-conscious measures exist. For these reasons, we recommend a higher overall goal and higher race-conscious goal to create a business environment that results in DBE utilization commensurate with availability."

The author also pointed out, "In Arizona, a small minority of DBEs are repeatedly used to achieve contract goals. The goals assessed for projects have been so low that only one or two trade areas at most are needed to meet goals. This results in minimal opportunity for other trades, representing the vast majority of DBE firms, to participate. Increasing goals to reflect actual availability creates an environment where the work is spread around, even within the DBE community itself."

The written testimony also indicates, "A larger DBE goal incentivizes uncertified firms to apply for certification. While the existing goal has provided limited opportunities, the contract goals are so low that the cost of doing business on federal aid contracts is more than the opportunity offered." In addition, the author reports that "for many years, ADOT DBE utilization has been significantly less than the proposed goal" and that "current utilization of DBE firms is substantially lower than the availability." [WT#11]

- A representative of a group of DBE-certified firms made these same points. [WT#14]
- At the Tucson public hearing, the Subcontinent Asian American owner of an engineering firm (PM#12) said that he thought the race- and gender-conscious projection for ADOT's proposed overall DBE goal was too low. He also recommended that ADOT select the upper end of the possible range of an overall DBE goal (18%) or use something in the middle of the range. [PM#12]
- A representative of a Hispanic American-owned engineering firm (PM#6) indicated that at the Tucson public hearing there was relatively high DBE availability for engineering, "What you really want is to be able to get some of the concrete people to work and some of the landscaping and other people that can be minority contractors that still have a chance to work with the times, but a goal like 9.3 percent ... is just too low to allow that to happen." He urged ADOT to use an 18.3 percent overall DBE goal and adjust downward in the future, if it not supported. [PM#6]
- A female owner of a landscape architecture firm (PM#8) said at the Tucson public hearing that ADOT's current and proposed overall DBE goal is low compared with states such as Oregon and Wisconsin. [PM#8]
- The Subcontinent Asian American owner of an engineering firm (PM#12) reported at the Tucson public hearing that ADOT needs to work to get more firms DBE-certified. He also urged ADOT to set a higher DBE goal. He indicated that a higher DBE goal would provide more incentive for potential DBEs to become certified. [PM#12]

- The Hispanic American male owner of an engineering firm (PM#14) testified at a one public hearing, "[ADOT's DBE] goals are so low that a lot of firms do not enter the ADOT market." He went on to recommend that ADOT select an overall DBE goal of 18.61 percent. "By utilizing that goal I think we can attract more small businesses to ADOT." He further explained that promotion of small businesses has overall employment benefits to the overall economy. He also recommended a split between the race-neutral and race-conscious projections for this goal that was higher for the race-conscious portion. [PM#14]
- At one public hearing, the Hispanic male representative of a minority contracting association (PM#4) supported a higher DBE goal "I think it incentivizes some of these small business that used to be part of the program and dropped out [when ADOT went to a 100 percent neutral program]. If they see that the goals are coming back and the possibility that they have an opportunity to be able to do some work for ADOT, it will incentivize them to be recertified again." He went on to say, "We have to get more of these potential DBEs that are out there to be certified as DBEs in order to increase the goals." He urged ADOT to set the goal at the 18.61 percent level and adjust it downward if it is not working at that level. The minority male owner of a construction firm (PM#14) agreed with this approach. [PM#4]

Some participants in the public comment process raised questions as to whether the proposed 9.38 percent overall DBE goal for FHWA-funded contracts might be too high.

- The representative of a local public agency commented, "It is my understanding that these goals were developed from data collected from firms who appeared could someday become a DBE. Will you have a cut- off date for the final goal in 2015 for determining how many of these firms became DBE's?" [WT#3]
- At the Tucson public hearing, a representative of a majority-owned engineering firm asked whether the analysis of potential DBEs considered whether firms would "dive into the ADOT pool." [PM#5]

K. Summary of 2015 Public Meeting Comments and other Input

Verbal and written comments solicited as part of additional stakeholder meetings in May and June of 2015 and as part of the 45-day public comment period in summer of 2015 ranged from input on ADOT's proposed overall DBE goals to comments on bidding and delays in payment.

Public meetings held in Flagstaff, Yuma, Tucson and Phoenix provided opportunities for public meeting participants to hear a presentation about the Disparity Study and ADOT's proposed overall DBE goals, as well as about other topics. Each participant was offered the opportunity to provide public comments during these meetings. Additional written testimony was received via email.

Public comments and written testimony included a number of topics.

- Discussion of ADOT's proposed overall DBE goals (page 100);
- Impact of higher overall goal and DBE contract goals (page 100);
- Continued inclusion of white women-owned DBEs as eligible to meet DBE contract goals (page 101);
- Impact of DBE contract goals on non-DBE firms (page 102);
- SDVOSB qualifying as a DBE (page 103);
- ADOT's technical assistance, paperwork and regulations (page 103);
- Bidding process for construction contracts (page 103);
- Existence of a "good ol' boy" network (page 103);
- Unfair bidding (page 104);
- Insurance requirements that prime contractors apply to subcontractors (page 104);
- Prompt payment (page 104); and
- Overall comments on the disparity study (page 104).

Discussion of ADOT's proposed overall DBE goals. Some public meeting attendees commented on ADOT's proposed overall DBE goals.

- A representative of an airport commented on ADOT's proposed overall DBE goals: "Their goals are lower than ours." [PM#28]
- A Principal in a DBE-certified engineering firm asked whether the goal is to "encourage utilization to be close to availability" or whether "there is a direct goal of trying to get more availability ... directly affect more DBEs entering the availability pool." [PM#32] [A team representative answered that the Federal DBE Program encourages both.]
- The minority female owner of a professional services firm reported, "Historically we have not had prime contractors regularly submit good-faith efforts when bidding Higher goals that reflect DBE availability absent the effect of discrimination would provide real time information on DBE availability and capacity. I would support a goal that reflects the actual DBE availability absent the effects of discrimination." [PM#45]

Impact of higher overall goal and DBE contract goals. The owner of a DBE-certified minority-owned general contracting and engineering company provided written comments indicating that, although his company has been in business for many years, "It is only until recently that companies have made the effort and have awarded us bids as DBE. Why? because the percentage has gone up."

He strongly recommended that the DBE percentage remain higher and that a mentor-protégé and a set-aside program be implemented. [WT#15]

Continued inclusion of white women-owned DBEs as eligible to meet DBE contract goals. Several comments pertained to ADOT's proposal to not change the DBE groups eligible to meet DBE contract goals.

- The female owner an engineering-related firm said that she was in support of ADOT's decision to have white women-owned DBEs count toward DBE contract goals. "We really appreciate that ADOT made that decision." [PM#33]
- A Principal of a DBE-certified engineering firm provided written comments supporting ADOT's proposal that white women-owned firms remain eligible to meet DBE contract goals. "Thank you for the presentation on the disparity analysis that ADOT is currently undergoing for Disadvantaged Business Enterprises. As I understand it, the women owned business enterprise that provide engineering design and construction services exceed the 80% [disparity index] threshold for being considered as a DBE, but ADOT has chosen to still consider these businesses as DBE's [eligible to meet DBE contract goals]. I am in support of this decision. Furthermore, it is my understanding the disparity analysis groups together women owned business enterprises that provide engineering planning/design and construction services. The revenue differential between planning/design and construction services is significant, and it appears that the planning/design portion [consider alone] falls well below the threshold. If this is the case, I would like to suggest that the planning/design portion of this group be considered separately from the construction services in determining if the group meets the required threshold limits. Thank you for your consideration." [WT#17]
- The female president of an engineering firm also wrote in support of ADOT's proposal that white women-owned DBEs remain eligible to meet DBE contract goals. "It has come to our attention that ADOT continues to support WBE's in its DBE certification and goal setting program even though the Disparity Study found a 95% utilization rate [disparity index] for WBE's in FHWA governed contracts. We at [our company] fully support this decision. We understand that these findings were based on combining WBE construction contracts with design/planning contracts. The study specifies that on ADOT engineering related contracts only 3% WBEs were able to propose and their success rate as was at 0%. These findings show that WBEs utilization rate is not uniform through all disciplines. The group experiences severe disparity and substantial disadvantage in important work categories related to ADOT contracts and therefore deserves the continued protection of the DBE program." [WT#18]

She went on to write, "For future disparity studies, we would like to suggest that the design/planning consulting portion of WBE's be studied separately from the construction WBE's as the revenue differential is significant between design/planning projects and construction projects. Thank you again for your support of WBE within the DBE certification program." [WT#18]

The president of a minority business trade association submitted written comments on behalf of his board of directors and members in support of ADOT's proposed inclusion of white women-owned firms as eligible to meet DBE contract goals. "It was noted in the findings of the Disparity Study performed by Keen Independent Research there was a utilization rate [disparity index] of Woman Business owners who are DBEs at 123%. This would show there is no disparity for women owned businesses. The over utilization was due to one company Coffman Specialties who received considerable large contracts that accounted for the over utilization. Further research showed Coffman Specialties was not eligible and denied DBE Certification. Removal of Coffman Specialties numbers from the study brought the utilization to around 90 percent utilization [disparity index] of Women DBEs showing there still is disparity." [WT#19]

"[The organization] strongly encourages that the Arizona Department of Transportation not pursue a waiver from the Federal Highway Administration to exclude Women DBEs from the DBE Program. Women DBEs are a vital part of the DBE Program and we feel it would be an injustice to them as well as degrade the program as a whole." [WT#19]

Impact of DBE contract goals on non-DBE firms. Two public meeting attendees commented on the impact of DBE contract goals on non-DBE firms.

A representative of a non-DBE trucking firm reported that his company had done a lot of ADOT work over the years, but "in about 2014 or the end of '14, the DBE rates [goals] have been raised. And the unintended consequence of that is that, in fact, our firm has not gotten on ADOT job, paving job, this year in 2015, and we've always done quite a bit of ADOT work." [PM#38]

"I'd like to comment that we have not always been the lowest bid. I mean, I recognize that, but I've been told often enough that I can't give you the work because I have to meet my DBE goals.' And this falls into ... the inordinate amount of weight going to one specific industry or another. It's happening now ... and it's happening to a great extent." "I think we need to continue to look at this overweighting, the easy way to achieve the DBE goal by going to trucking, because we can't continue to survive without bring it upward." [PM#38]

"One of the contributing factors to this disparity is the fact that a lot of the ADOT work now that's come up in the past year or two is what we call 'pave and preservation,' which is just 'mill and fill.' And you've got a striper guy out there and you've got a guy that does milling, and so where else are you going to get your [DBE] participation ... you have to get trucking." [PM#38]

■ After listening to this comment, the president of a minority business association observed, "Looking back at this gentleman's issue, I would look at it that DBE firms are stepping up their game and meeting the requirements necessary to go and do that work and compete with non-DBE firms." [PM#40]

■ The representative of a non-DBE trucking firm responded, "DBE firms have overloaded themselves. They can't perform the work. I'm getting called to numerous jobs, 'please come bail us out, we need trucks, we can't get the trucks, these guys have overcommitted, they can't get it done.' So we are going back up there to try and help out as best we can." [PM#38]

SDVOSB qualifying as a DBE. One individual who made a written comment stated, "If ADOT follows the Federal guidelines how come SDVOSBs [service-disabled veteran-owned small business concerns] aren't recognized as DBE?" [WT#14]

ADOT's technical assistance, paperwork and regulations. A Principal in a DBE-certified engineering firm said, "The assistance that ADOT gives, from our experience with our company ... the assistance that ADOT gives in terms of dealing with the paperwork and the compliance and the regulations is very beneficial. It doesn't reduce the amount of it, though, and that's still a barrier to entry for small businesses." [PM#32]

Bidding process for construction contracts. Some commented on the bidding process for construction contracts.

- A State Senator reported that she has constituents who are owners of companies who do highway projects. "I want to know ... it seems like, down here in Yuma County ... [that projects] are done by companies out of Maricopa County. We are large enough now in Yuma County to be able to handle large projects, and have the businesses that can do them and would like to be considered for ones that are designated for Yuma County." [PM#29] In response, an ADOT representative went through the low bid process typically used by local governments for construction contracts.
- A City of Yuma staff member also reported how bids were advertised, "We posted through AZPurchasing which posts our bids as well as pretty much everywhere in Arizona. And then any company that is registered through that website or that will see it in the newspaper, they would go in, download all the documents for the bid, and then they will have to meet our, you know, insurance requirements. That's one of the big ones." She went on to report that bonding was required and that contractor qualifications to do the job are reviewed. [PM#27]

Existence of a "good ol' boy" network. The minority female co-founder of a services firm commented on the existence of a "good ol' boy" network. She said, "Well, the good old boy network as it stands ... and was one of those who believed that unless you are part of that group that have been doing business with the same people all the time, the opportunity to bring new minority women-owned business are very slim." She went on to say, "The amount of work that we have received is very minimal" "So it isn't like people don't know who you are. It's more that whoever they have been doing business with and they're comfortable with, that's who they stick with. So my suggestion was that there's got to be a way to establish some kind of incentive to the primes that will give an opportunity to those companies that they have not used in the past; otherwise, they will continue to work with those people who they're comfortable with." [PM#43]

Unfair bidding. One individual submitting written comments reported that there were unfair bidding practices regarding supplies on a large ADOT project. It appeared, according to the commenter, that a supplier underbid certain items in order to get other parts of the entire bid where it had distributorship advantages. He reported, "This is unfair to other suppliers who only offer one or two items and can['t] compete with the million \$ Corp. This is been going on for quite a while with ADOT knowing of the problem but don't want to fix it because [these] are the same companies who have deep pockets and pay for golf outings, sponsor out of town conferences, etc." [WT#14]

Insurance requirements that prime contractors apply to subcontractors. The owner of a DBE-certified minority-owned construction-related business reported unfair treatment by prime contractors that require excessive insurance coverage by subcontractors. "Well I don't have a problem meeting the ADOT requirements. It's the contractor requirements that I have a problem with ... the contracts that I get make me the prime insurer of the project, basically, and I can't keep them." [PM#31]

Prompt payment. The owner of a DBE-certified minority-owned general contracting and engineering company wrote, "... we have also experienced what are considered discriminatory practices by not being paid under the prompt payment act and the General Contractors withholding a retention Further, that guidelines be placed to prevent General Contractors from withholding payment and arbitrarily accusing DBE of delay of job." [WT#15]

Overall comments on the disparity study. A representative of a local public agency provided a written comment indicating that "the presentation and the methodology look thorough" and went on to provide some suggestions about how to organize it so that it is easier to follow. [WT#16] Others added:

- A State Senator reported [PM#29] said that "All I have to say is that the work that you did was enormous."
- A representative of an airport [PM#30] said, "This is extremely valuable for us because we have the same requirement to do the same document that you guys have just produced"